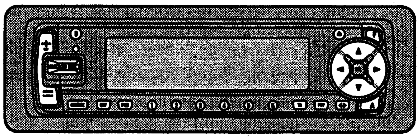
Service Manual

Pioneer

KEH-P8800R/EW



ORDER NO.
CRT2341

MULTI-CD/MD/DAB CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P8800R EW

KEH-P8800R-W EW

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH FM/AM TUNER

KEH-P8850 ES

- **See the separate manual CX-631(CRT1640) for the cassette mechanism description.**
- **The cassette mechanism assy employed in this model is one of 2L series.**
- **Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.**
- **This service manual does not describe the CD test mode. For the operations in the CD test mode, refer to the CD player's Service manual.**

SERVICE PRECAUTION : (KEH-P8850/ES only)
In the first production, the following parts had been mounted temporarily to support the microcomputer IC601 (PD5496A): R631 (RS1/10S102J), R632 (RS1/10S473J), and IC631 (Non spare part).
When replacing IC601 PD5496A, use PD5496B as IC601, and then remove the 3 parts listed above.

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K-ZZB. APR. 1999

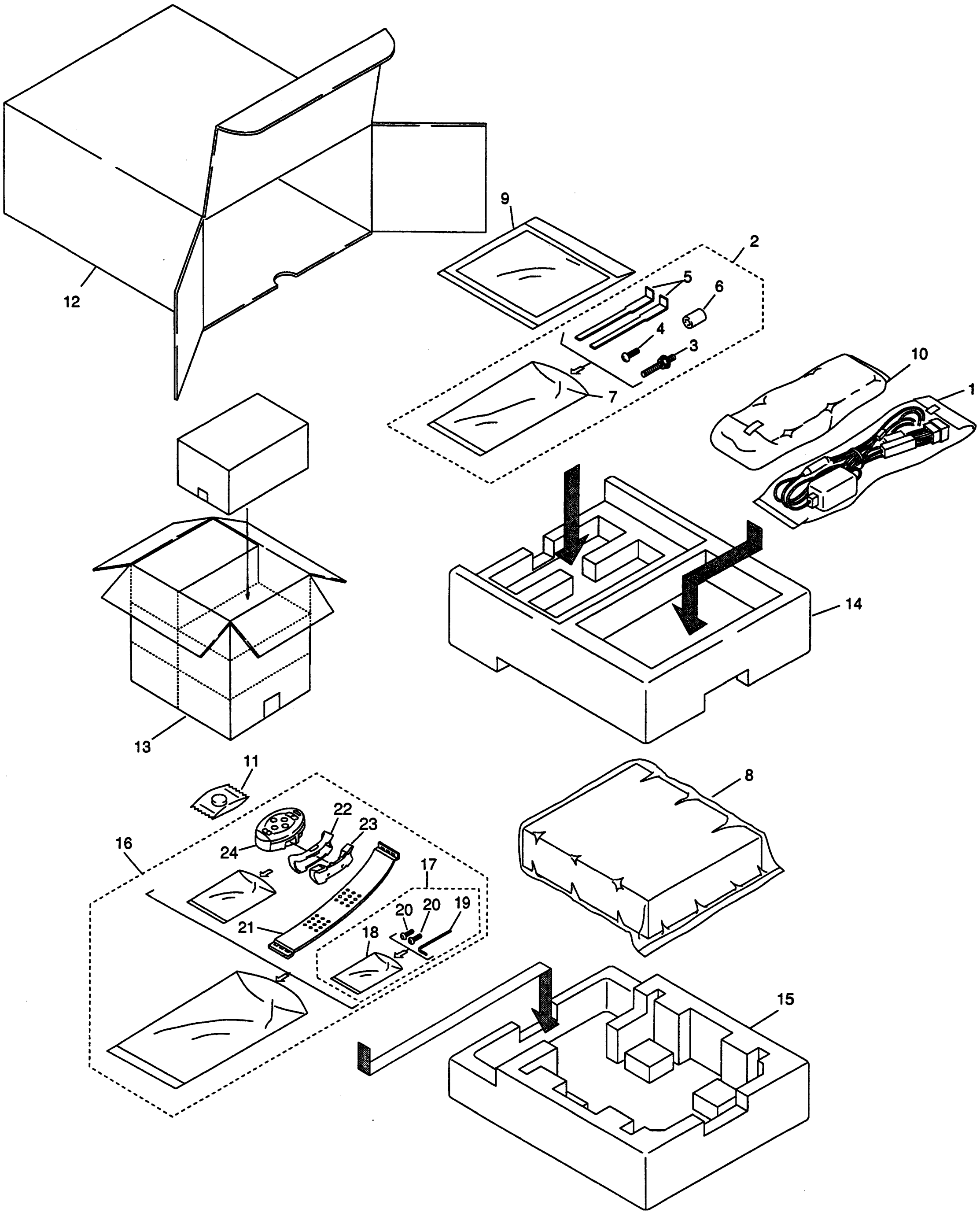
1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING

● KEH-P8800R/EW, KEH-P8800R-W/EW



NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

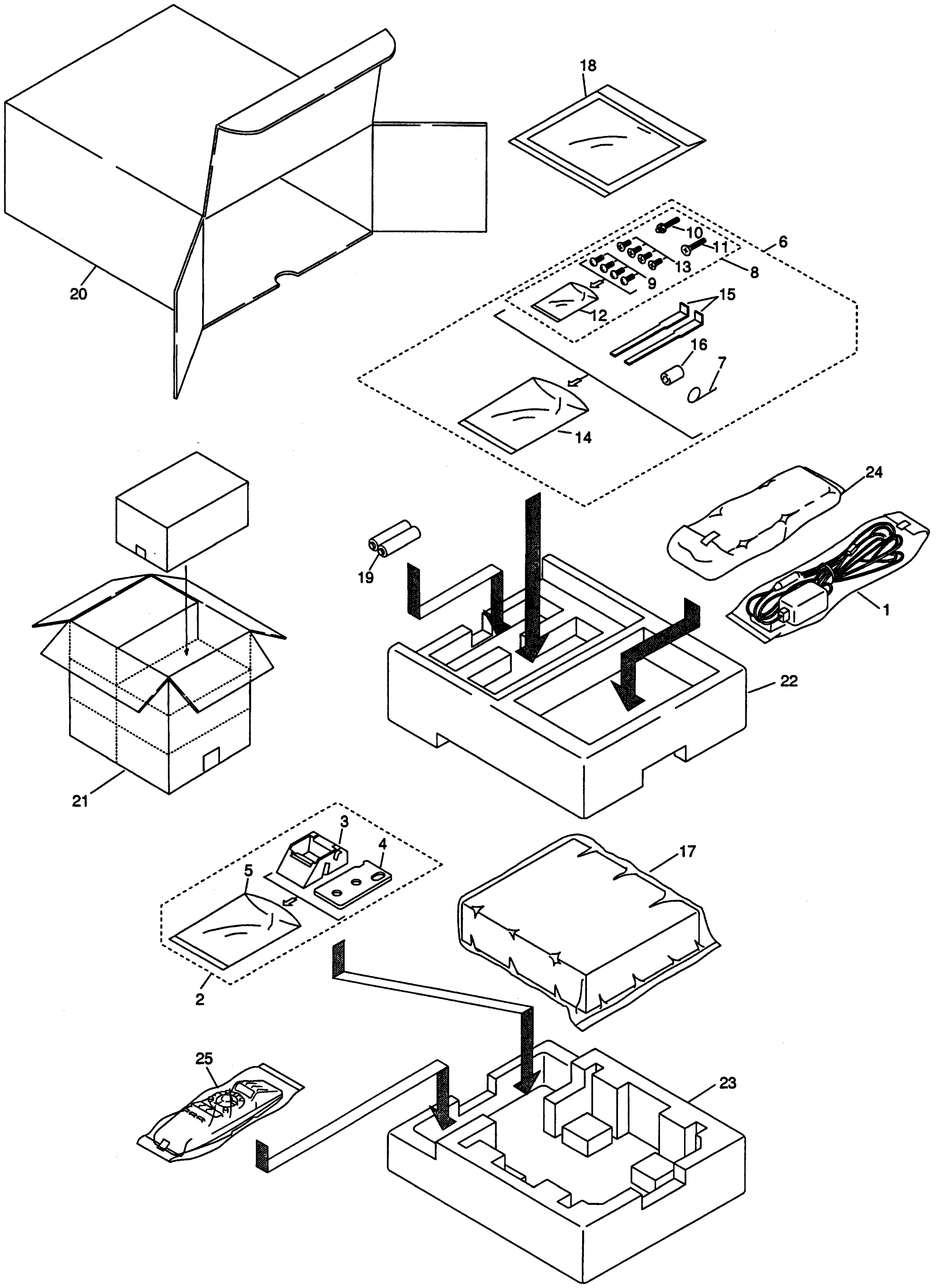
● PACKING SECTION PARTS LIST

			Part No.	
Mark	No.	Description	KEH-P8800R/EW	KEH-P8800R-W/EW
	1	Cord Assy	CDE6007	CDE6007
	2	Accessory Assy	CEA2538	CEA2538
	3	Screw	CBA1002	CBA1002
	4	Screw	CBA1120	CBA1120
	5	Handle	CNC5395	CNC5395
	6	Bush	CNV1917	CNV1917
*	7	Polyethylene Bag	E36-615	E36-615
*	8	Cover	CEG1088	CEG1088
	9-1	Polyethylene Bag	CEG1116	CEG1116
	9-2	Owner's Manual	CRD2956	CRD2956
	9-3	Owner's Manual	CRD2957	CRD2957
	9-4	Owner's Manual	CRD2958	CRD2958
	9-5	Installation Manual	CRD2959	CRD2959
*	9-6	Caution Card	CRP1207	CRP1207
	9-7	Passport	CRY1013	CRY1013
*	9-8	Warranty Card	CRY1087	CRY1087
	9-9	Caution Card	CRP1208	CRP1208
	10	Case Assy	CXB3520	CXB3520
	11	Battery	CEX1030	CEX1030
	12	Carton	CHG3778	CHG3779
	13	Contain Box	CHL3778	CHL3779
	14	Protector	CHP2186	CHP2186
	15	Protector	CHP2187	CHP2187
	16	Remote Control Assy	CXB3488	CXB3488
	17	Screw Assy	CZE3169	CZE3169
*	18	Polyethylene Bag	CEG-127	CEG-127
*	19	Hexagonal Wrench	CZE3176	CZE3176
*	20	Screw	RMZ30H060FBK	RMZ30H060FBK
	21	Belt	CZN6416	CZN6416
	22	Holder Assy	CZX3172	CZX3172
	23	Holder Assy	CZX3173	CZX3173
	24	Remote Control Assy	CZX3231	CZX3231

● Owner's Manual, Installation Manual

Model	Part No.	Language
KEH-P8800R/EW KEH-P8800R-W/EW	CRD2956	English, Spanish
	CRD2957	German, French
	CRD2958	Italian, Dutch
	CRD2959	English, Spanish, German, French, Italian, Dutch

● KEH-P8850/ES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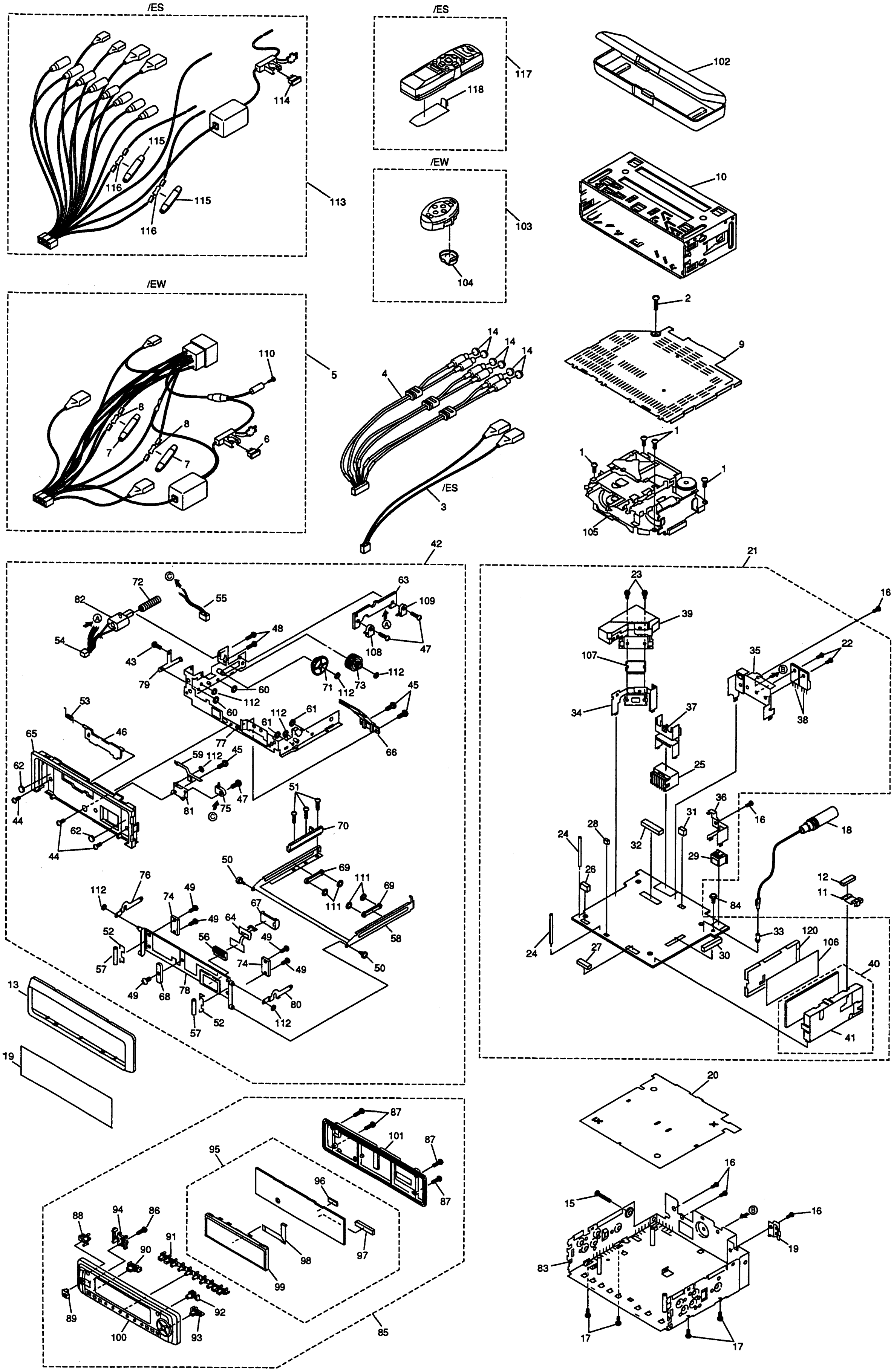
● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDE5867
	2	Base Assy	CEA2426
*	3	Base	CNS5031
*	4	Sheet	CZA3371
	5	Polyethylene Bag	CZE3188
*	6	Accessory Assy	CEA2431
	7	Spring	CBH-865
*	8	Screw Assy	CEA2434
	9	Screw	BMZ50P060FMC
	10	Screw	CBA1002
	11	Screw	CBA1120
*	12	Polyethylene Bag	CEG-127
	13	Screw	CMZ50P060FMC
*	14	Polyethylene Bag	CEG-158
	15	Handle	CNC5395
	16	Bush	CNV1917
*	17	Cover	CEG1088
	18-1	Polyethylene Bag	CEG1116
	18-2	Owner's Manual	CRD2962
	18-3	Owner's Manual	CRD2963
	18-4	Installation Manual	CRD2964
*	18-5	Caution Card	CRP1207
	19	Battery	CEX1006
	20	Carton	CHG3777
	21	Contain Box	CHL3777
	22	Protector	CHP2186
	23	Protector	CHP2187
	24	Case Assy	CXB3520
	25	Remote Control Assy	CXB3875

● Owner's Manual, Installation Manual

Model	Part No.	Language
KEH-P8850/ES	CRD2962	English, Spanish
	CRD2963	Portuguese, Arabic
	CRD2964	English, Spanish, Portuguese, Arabic

2.2 EXTERIOR


/ES
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(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ26P050FMC
	2	Screw	BSZ30P120FMC
	3	Cord Assy	See Contrast table(2)
	4	Cord Assy	CDE5863
	5	Cord Assy	See Contrast table(2)
	6	Fuse(10A)	See Contrast table(2)
	7	Cap	See Contrast table(2)
	8	Resistor	See Contrast table(2)
	9	Case	CNB2427
	10	Holder	CNC6798
	11	Earth Terminal	See Contrast table(2)
	12	Cushion	See Contrast table(2)
	13	Panel	See Contrast table(2)
	14	Cap	CNV2680
	15	Screw	BMZ30P230FMC
	16	Screw	BSZ30P050FMC
	17	Screw	CBA1447
	18	Antenna Cable	CDH1263
	19	Holder	CNC4963
	20	Insulator	CNM6137
	21	Tuner Amp Unit	See Contrast table(2)
	22	Screw	ASZ26P080FMC
	23	Screw	BMZ26P200FMC
	24	Clamper	CEF1007
	25	Plug(CN901)	CKM1278
	26	Plug(CN851)	CKS-786
	27	Connector(CN801)	CKS1532
	28	Connector(CN902)	CKS3124
	29	Connector(CN101)	CKS3408
	30	Connector(CN651)	CKS3568
	31	Connector(CN681)	See Contrast table(2)
	32	Connector(CN351)	CKS3606
	33	Mini Jack(CN451)	CKX1046
	34	Holder	CNC8171
	35	Holder	CNC8174
	36	Holder	CNC8176
	37	Holder	See Contrast table(2)
	38	Transistor(Q803,921)	2SD2396
	39	Heat Sink	CNR1536
	40	FM/AM Tuner Unit	See Contrast table(2)
	41	Holder	CNC7532
	42	Panel Assy	CXB3581
	43	Screw	BMZ20P030FMC
	44	Screw	CBA1154
	45	Screw	BPZ20P060FMC
	46	Door	CAT2016
	47	Screw	CBA1060
	48	Screw	CBA1061
	49	Screw	CBA1082
	50	Screw	CBA1430
	51	Screw	CBA1454
	52	Spring	CBH2130
	53	Spring	CBH2251
	54	Cord	CDE5960
	55	Cord	CDE6003
	56	Connector(CN9001)	CKS3997
	57	Roller	CLA3583
	58	Frame	CNC8201
	59	Arm	CNC8293
	60	Spacer	CNM6155
	61	Spacer	CNM6156
	62	Spacer	CNM6419
	63	PCB	CNP5321
	64	PCB	CNP5355
	65	Panel	CNS5249
	66	Lighting Conductor	CNV5608
	67	Cover	CNV5610
	68	Guide	CNV5672
	69	Guide	CNV5696
	70	Rack	CNV5697
	71	Gear	CNV5698
	72	Gear	CNV5761
	73	Torque Limiter Unit	CNV5762
	74	Holder	CNV5763
	75	Switch(S953)	CSN1022
	76	Arm Unit	CXB3574
	77	Frame Unit	CXB3575
	78	Holder Unit	CXB3576
	79	Bracket Unit	CXB3577
	80	Arm Unit	CXB3866
	81	Holder Unit	CXB3867
	82	Motor(M951)	CXM1085
	83	Chassis Unit	See Contrast table(2)
	84	Screw	ISS26P055FUC
	85	Detach Grille Assy	See Contrast table(2)
	86	Screw	BPZ20P060FMC
	87	Screw	BPZ20P080FZK
	88	Button(D)	CAC5891
	89	Button(EQ)	See Contrast table(2)
	90	Button(SOURCE)	See Contrast table(2)
	91	Button(1-6)	See Contrast table(2)
	92	Button(⏏)	See Contrast table(2)
	93	Button(◁▷)	See Contrast table(2)
	94	Housing	CNV5606
	95	Keyboard Unit	See Contrast table(2)
	96	Connector(CN1902)	CKS3995
	97	Connector(CN1901)	CKS3996
*	98	PCB	CNP5508
	99	OEL Module	MXK8002
	100	Grille Unit	See Contrast table(2)

Mark	No.	Description	Part No.
	101	Cover Unit	See Contrast table(2)
	102	Case Assy	CXB3520
	103	Remote Control Assy	See Contrast table(2)
	104	Battery Cover	See Contrast table(2)
	105	Cassette Mechanism Module	EXK3990
	106	Insulator	See Contrast table(2)
	107	IC(IC301)	PAL005A
	108	Switch(S952)	CNS1022
	109	Switch(S951)	CNS1012
	110	Terminal Cap	See Contrast table(2)

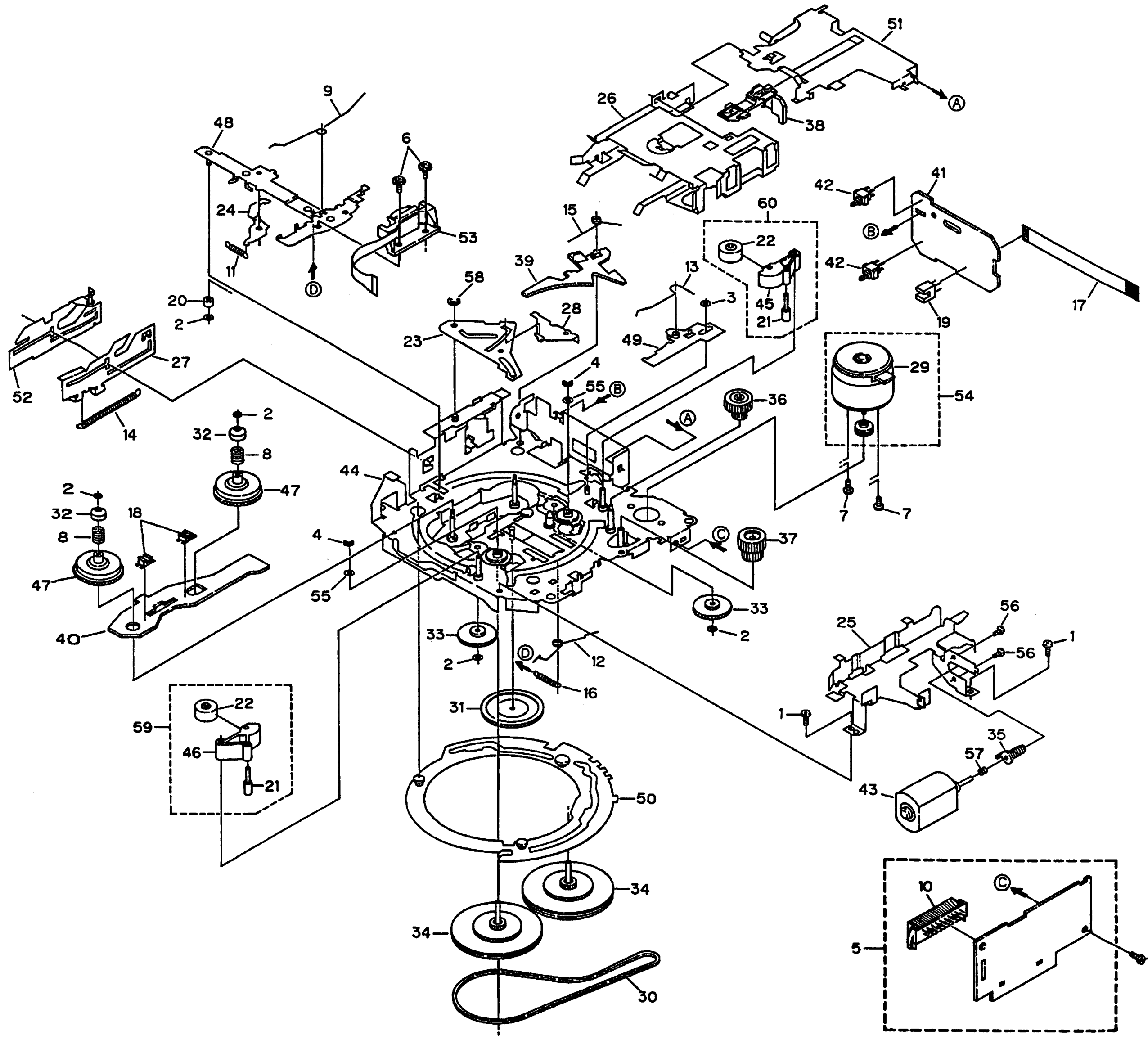
Mark	No.	Description	Part No.
	111	Washer	2-1816-0035-D2-00
	112	Washer	2-1821-0045-D2-00
	113	Cord Assy	See Contrast table(2)
	114	Fuse(10A)	See Contrast table(2)
	115	Cap	See Contrast table(2)
	116	Resistor	See Contrast table(2)
	117	Remote Control Assy	See Contrast table(2)
	118	Battery Cover	See Contrast table(2)
	119	Cover	See Contrast table(2)
	120	Holder	CNC7533

(2) CONTRAST TABLE

KEH-P8800R/EW, KEH-P8800R-W/EW and KEH-P8850/ES are constructed same except for the following:

Mark	No.	Description	Part No.		
			KEH-P8800R/EW	KEH-P8800R-W/EW	KEH-P8850/ES
	3	Cord Assy	Not used	Not used	CDE5853
	5	Cord Assy	CDE6007	CDE6007	Not used
	6	Fuse(10A)	CEK1136	CEK1136	Not used
	7	Cap	CNS1472	CNS1472	Not used
	8	Resistor	RS1/2PMF102J	RS1/2PMF102J	Not used
	11	Earth Terminal	CNC8019	CNC8019	CNC7358
	12	Spacer	CNM6482	CNM6482	CNM4870(Cushion)
	13	Panel	CNS5256	CSN5581	CNS5548
	21	Tuner Amp Unit	CWM6305	CWM6305	CWM6307
	31	Connector(CN681)	Not used	Not used	CKS3582
	37	Holder	CNC8172	CNC8172	CNC8178
	40	FM/AM Tuner Unit	CWE1500	CWE1500	CWE1501
	83	Chassis Unit	CXB3563	CXB4040	CXB3586
	85	Detach Grille Assy	CXB3291	CXB3981	CXB3293
	89	Button(EQ)	CNC5894	CNC6200	CAC5899
	90	Button(SOURCE)	CNC5892	CNC5892	CAC5901
	91	Button(1-6)	CNC5896	CNC6201	CAC5911
	92	Button(⏏)	CNC5890	CNC6199	CAC6126
	93	Button(◁▷)	CNC5926	CNC5926	CAC6146
	95	Keyboard Unit	CWM6225	CWM6225	CWM6226
	100	Grille Unit	CXB3289	CXB4951	CXB3292
	101	Cover Unit	CXB4309	CXB4311	CXB4310
	103	Remote Control Assy	CZX3231	CZX3231	Not used
	104	Cover	CZN6410	CZN6410	Not used
	106	Insulator	CNM5967	CNM5967	Not used
	110	Terminal Cap	Not used	Not used	CKX-003
	113	Cord Assy	Not used	Not used	CDE5867
	114	Fuse(10A)	Not used	Not used	CEK1136
	115	Cap	Not used	Not used	CNS1472
	116	Resistor	Not used	Not used	RS1/2PMF102J
	117	Remote Control Assy	Not used	Not used	CXB3875
	118	Battery Cover	Not used	Not used	CNS5032
	119	Cover	Not used	CNM4710	Not used

2.3 CASSETTE MECHANISM MODULE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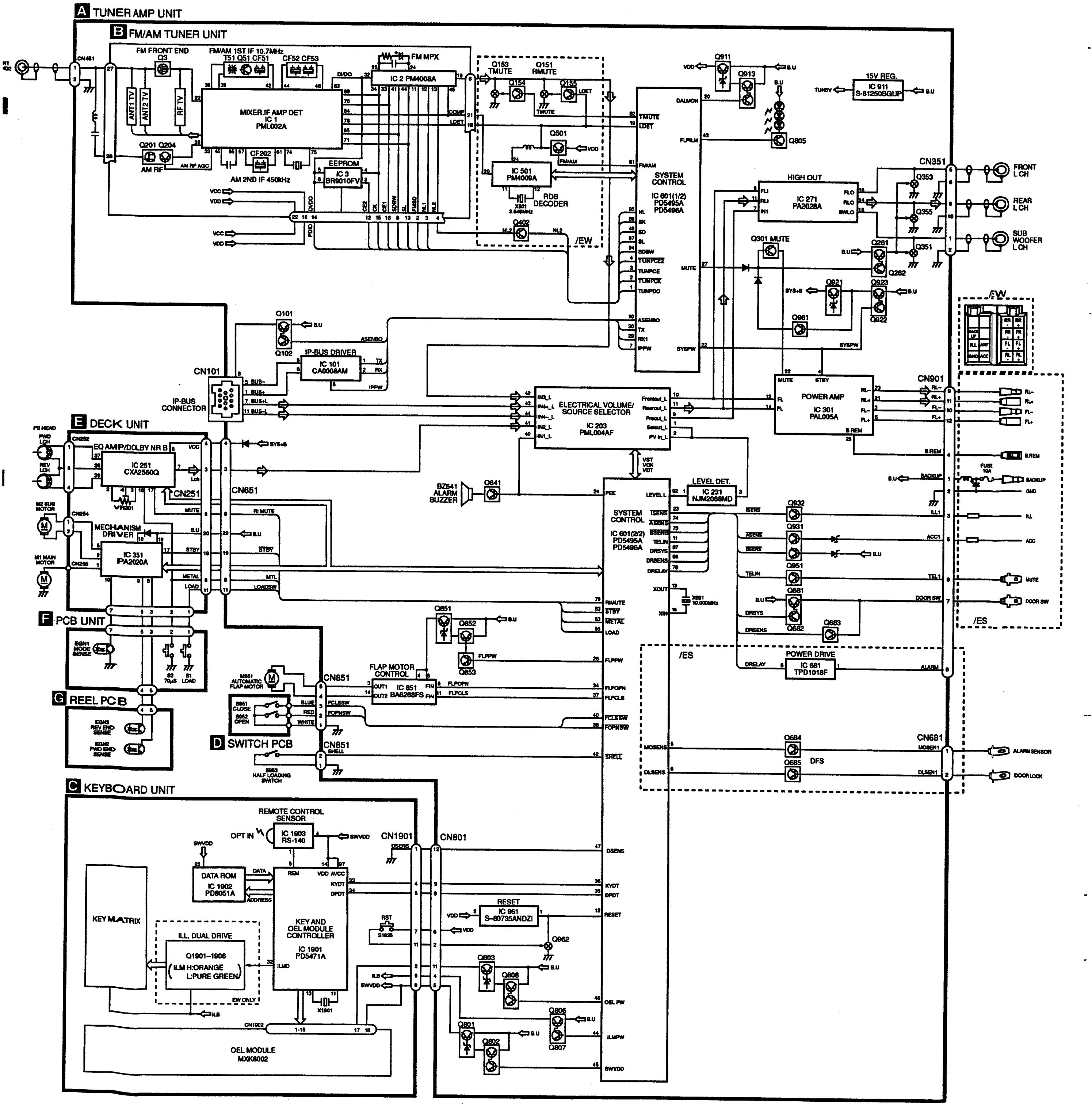
● CASSETTE MECHANISM MODULE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BSZ20P040FMC
	2	Washer	CBF1037
	3	Washer	CBF1038
	4	Washer	CBG1003
	5	Deck Unit	EWM1018
	6	Screw	EBA1028
	7	Screw	EBA1037
	8	Spring	EBH1531
	9	Spring	EBH1575
	10	Plug(CN251)	CKS3540
	11	Spring	EBH1515
	12	Spring	EBH1587
	13	Spring	EBH1517
	14	Spring	EBH1518
	15	Spring	EBH1519
	16	Spring	EBH1537
	17	Cord	EDD1020
	18	Photo-interrupter(EGN2,3)	EGN1006
	19	Photo-interrupter(EGN1)	EGN1005
	20	Roller	ENR1031
	21	Shaft	ELA1373
	22	Pinch Roller	ENV1518
	23	Arm	ENC1489
	24	Arm	ENC1397
	25	Guide	ENC1481
	26	Holder	ENC1417
	27	Lever	ENC1448
	28	Arm	ENC1488
	29	Motor	EXM1027
	30	Belt	ENT1027
	31	Gear	ENV1347
	32	Collar	ENV1508
	33	Gear	ENV1350
	34	Flywheel	ENV1500
	35	Worm Gear	ENV1439
	36	Worm Wheel	ENV1440
	37	Gear	ENR1037
	38	Lever	ENV1442
	39	Arm	ENV1525
	40	Gathering PCB	ENX1037
	41	Gathering PCB	ENX1042
	42	Switch(S1,S2)	ESG1004
	43	Motor Unit(M2)	EXA1485
	44	Chassis Unit	EXA1567
	45	Pinch Holder	ENV1485
	46	Pinch Holder	ENV1486
	47	Reel Unit	EXA1543
	48	Head Base Unit	EXA1457
	49	Lever Unit	EXA1438
	50	Gear Unit	EXA1545
	51	Frame Unit	EXA1458
	52	Lever Unit	EXA1439
	53	Head Assy(HD1)	EXA1506
	54	Motor Unit(M1)	EXA1490
	55	Washer	HBF-179
	56	Screw	BMZ20P022FMC
	57	Spring	EBH1545
	58	Washer	YE20FUC
	59	Pinch Holder Unit	EXA1529
	60	Pinch Holder Unit	EXA1528

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM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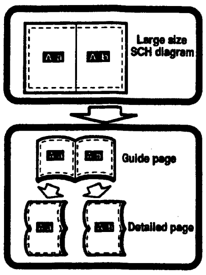
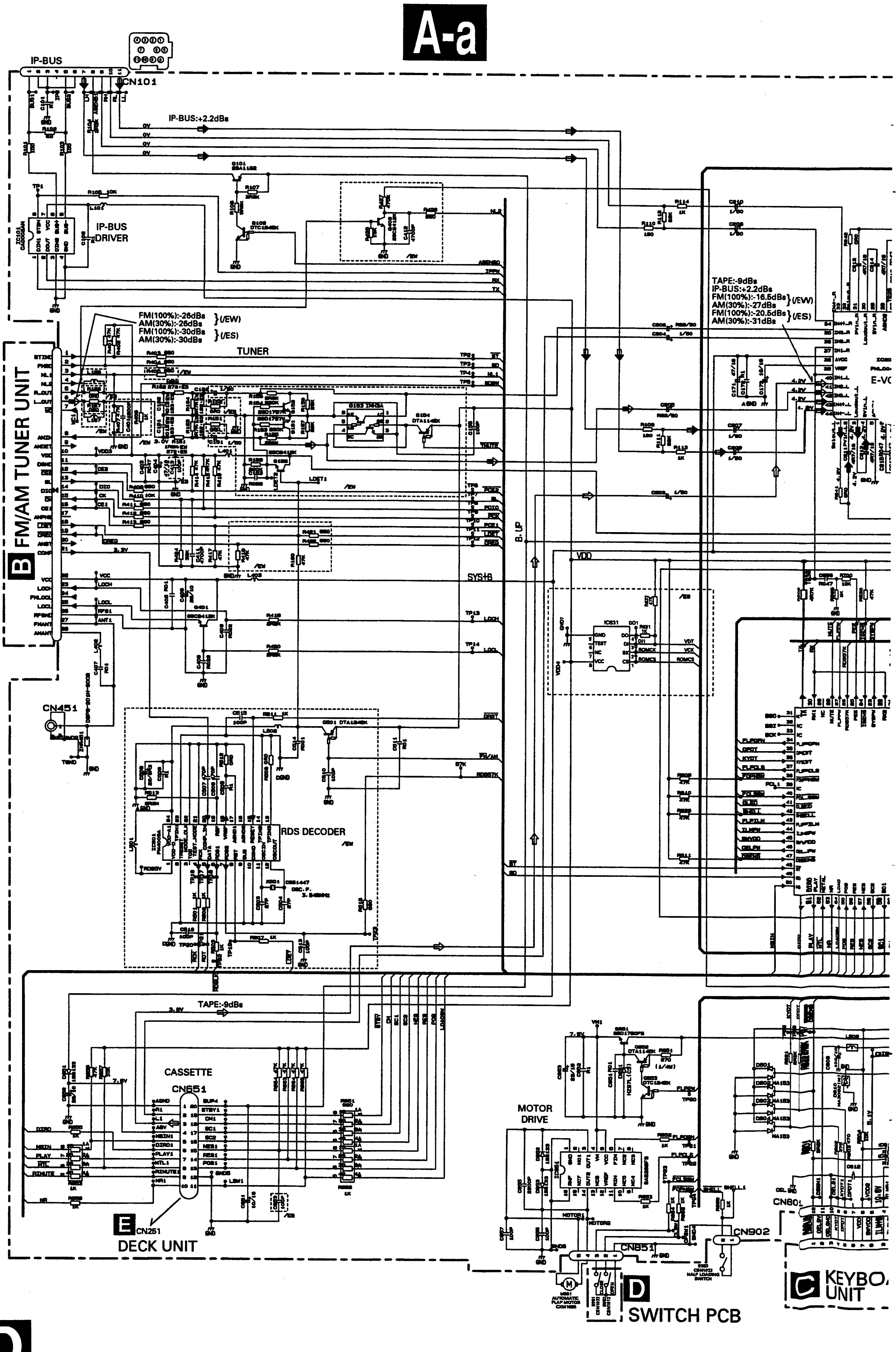
B FM/AM TUNER UNIT
FM FRONT END Q3
FM/AM 1ST IF 10.7MHz T51 Q51 CF51
CF52 CF53
FM MPX
IC 2 PM4008A
MIXER,IF AMP DET IC 1 PML002A
ANT1 TV
ANT2 TV
RF TV
Q201 Q204 AM RF
AM RF AGC
CF202
AM 2ND IF 450kHz
EEPROM IC 3 BR9010FV
Q153 TMUTE
Q151 RMUTE
Q154
Q155
Q501
IC 501 PM4009A
RDS DECODER
X501 3.648MHz
Q402
/EW
Q911
Q913
Q805
15V REG. IC 911 S-81250SGUP
SYSTEM CONTROL IC 601(1/2) PD5495A PD5496A
HIGH OUT IC 271 PA2026A
CN351
Q353
Q355
Q351
FRONT L CH
REAR L CH
SUB WOOFER L CH
Q301 MUTE
Q261
Q262
Q921
Q923
Q922
Q981
Q101
Q102
IP-BUS DRIVER IC 101 CA0008AM
CN101
IP-BUS CONNECTOR
BUS-
BUS+
BUS+L
BUS-L
ELECTRICAL VOLUME/ SOURCE SELECTOR IC 203 PML004AF
POWER AMP IC 301 PAL005A
CN901
E DECK UNIT
PB HEAD
CN252
EQ AMP/DOLBY NR B
IC 251 CXA2560Q
VR251
CN251
CN651
M2 SUB MOTOR
CN254
MECHANISM DRIVER
IC 351 PA2020A
M1 MAIN MOTOR
CN255
BZ641 ALARM BUZZER
Q641
LEVEL DET. IC 231 NJM2068MD
SYSTEM CONTROL IC 601(2/2) PD5495A PD5496A
X601 10.000MHz
Q932
Q931
Q951
Q681
Q682
Q683
FUSE 10A
B.REM
BACKUP
GND
ILL
ACC
MUTE
DOOR SW
/ES
F PCB UNIT
EGN1 MODE SENSE
S2 70μS
S1 LOAD
G REEL PCB
EGN3 REV END SENSE
EGN2 FWD END SENSE
Q651
Q652
Q653
FLAP MOTOR CONTROL IC 851 BA6288FS
M851 AUTOMATIC FLAP MOTOR
CN851
S861 CLOSE
S862 OPEN
D SWITCH PCB
S863 HALF LOADING SWITCH
POWER DRIVE IC 681 TPD1018F
Q684
Q685
DFS
CN681
ALARM SENSOR
DOOR LOCK
C KEYBOARD UNIT
REMOTE CONTROL SENSOR
OPT IN
IC 1903 RS-140
CN1901
CN801
DATA ROM IC 1902 PD8051A
KEY MATRIX
KEY AND OEL MODULE CONTROLLER IC 1901 PD5471A
ILL, DUAL DRIVE
Q1901–1906
ILM H:ORANGE L:PURE GREEN
EW ONLY
X1901
RESET IC 961 S-80735ANDZI
RST S1925
Q962
Q803
Q808
Q806
Q807
Q801
Q802
CN1902
OEL MODULE MXK8002

KEH-P8800R,P8800R-W,P8850

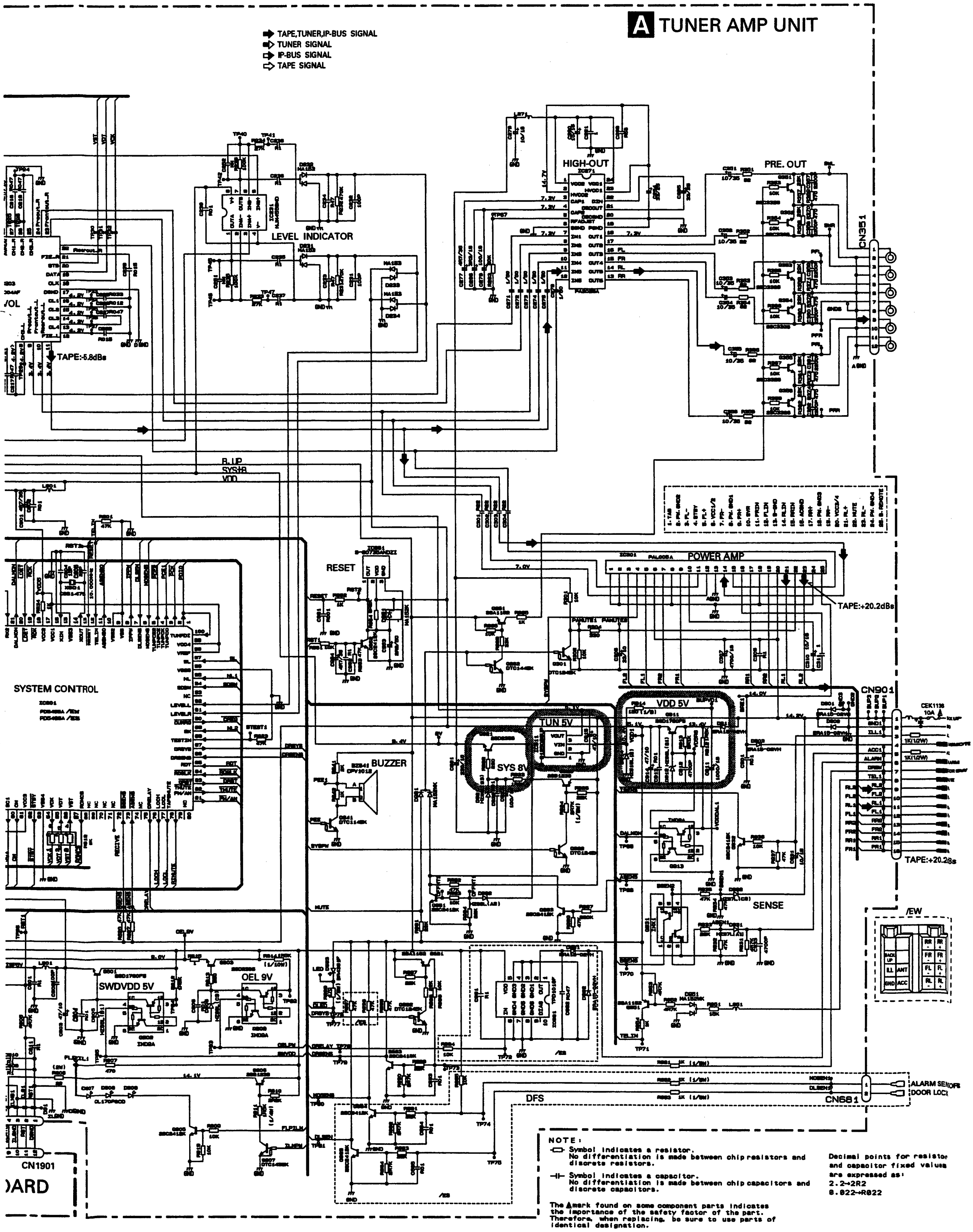
3.2 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".


A-a
A-b
Large size SCH diagram
Guide page
Detailed page


A-a
IP-BUS
CN101
IP-BUS:+2.2dBs
IP-BUS DRIVER
FM(100%):-26dBs
AM(30%):-26dBs
FM(100%):-30dBs
AM(30%):-30dBs
(/EW)
(/ES)
TUNER
B FM/AM TUNER UNIT
B. UP
VDD
SYS+B
IC631
TAPE:-9dBs
IP-BUS:+2.2dBs
FM(100%):-16.5dBs
AM(30%):-27dBs
FM(100%):-20.5dBs
AM(30%):-31dBs
E-VC
CN451
RDS DECODER
TAPE:-9dBs
CASSETTE
CN651
E CN251
DECK UNIT
MOTOR DRIVE
CN851
CN902
CN801
M851 AUTOMATIC FLAP MOTOR
D SWITCH PCB
C KEYBOARD UNIT

A-b


A TUNER AMP UNIT
TAPE,TUNER,IP-BUS SIGNAL
TUNER SIGNAL
IP-BUS SIGNAL
TAPE SIGNAL
HIGH-OUT
PRE. OUT
LEVEL INDICATOR
CN351
TAPE:-5.8dBs
B.UP
SYS+B
VDD
RESET
POWER AMP
TAPE:+20.2dBs
SYSTEM CONTROL
BUZZER
SYS 8V
TUN 5V
VDD 5V
CN901
TAPE:+20.2dBs
SENSE
/EW
SWDVDD 5V
OEL 9V
DFS
CN681
ALARM SENSORS
DOOR LOCK
CN1901
)ARD

NOTE:

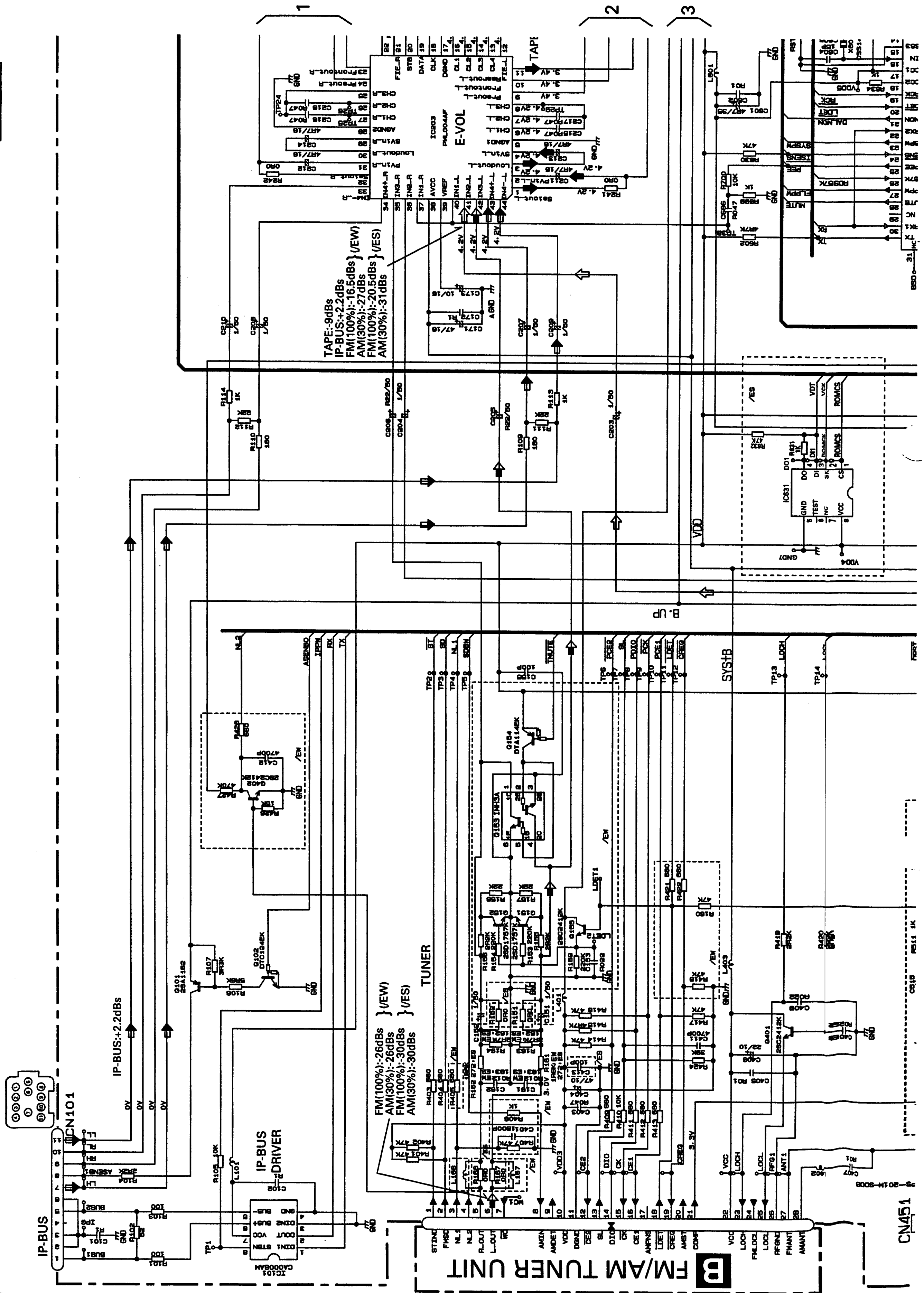
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

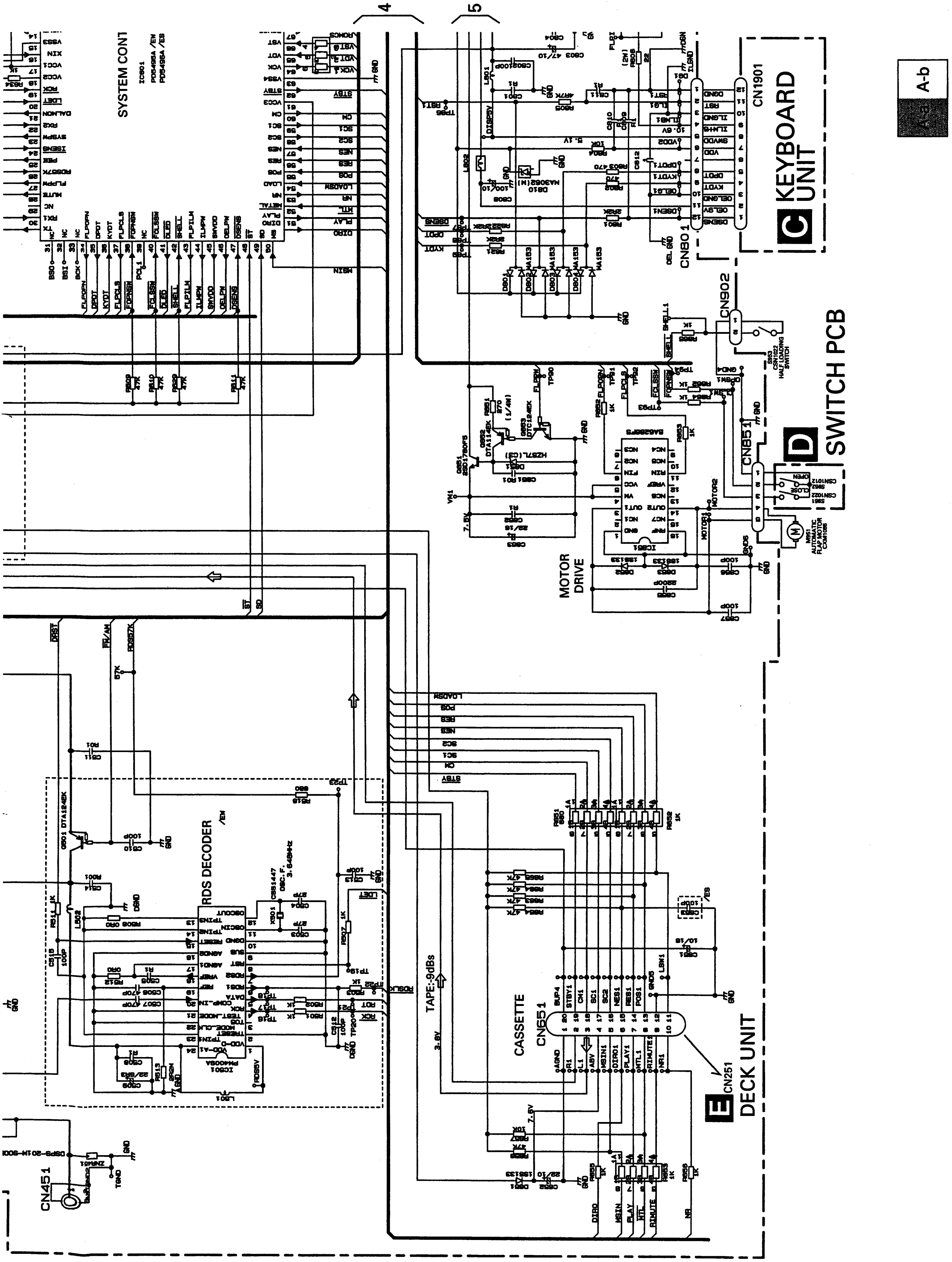
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

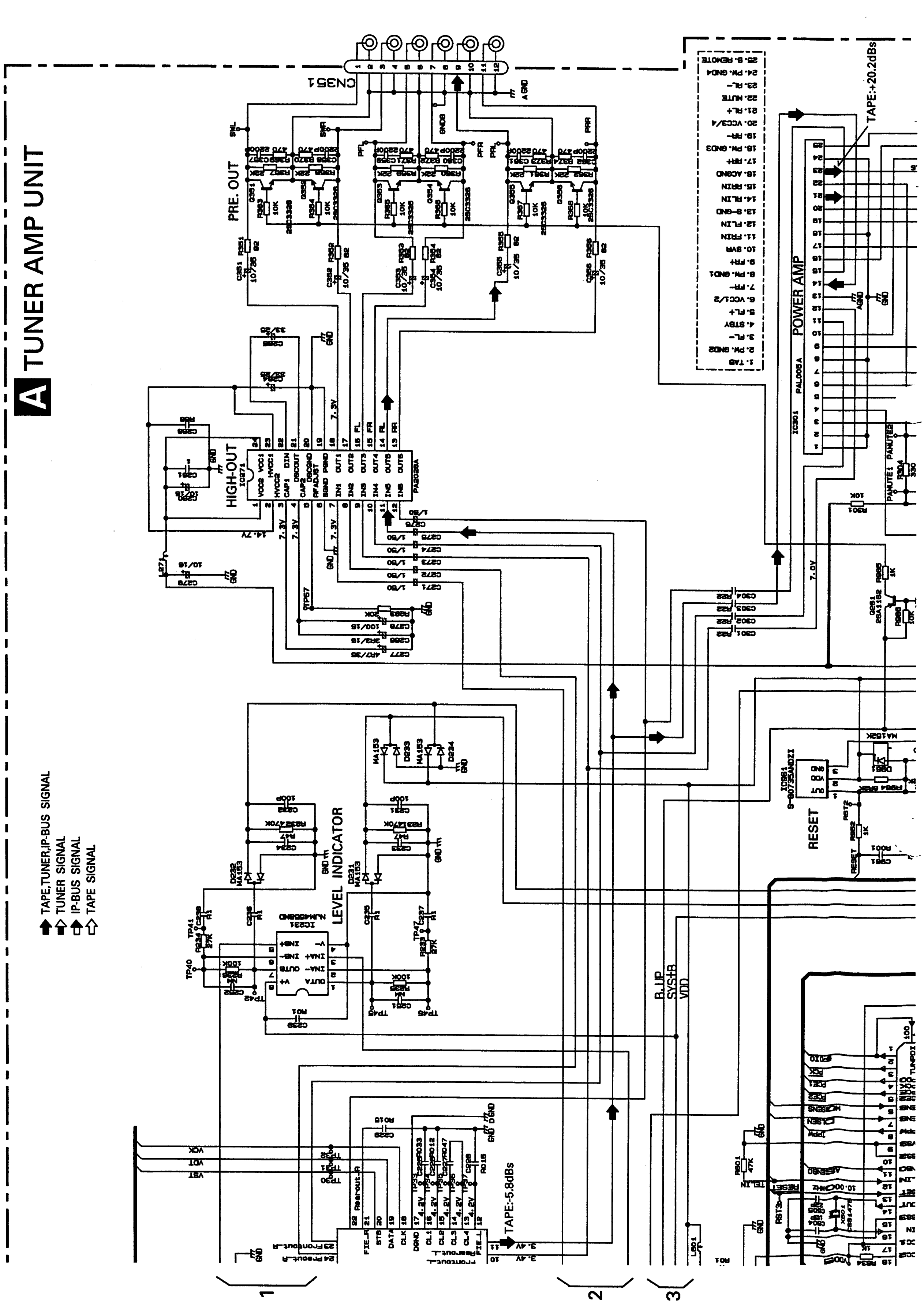
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

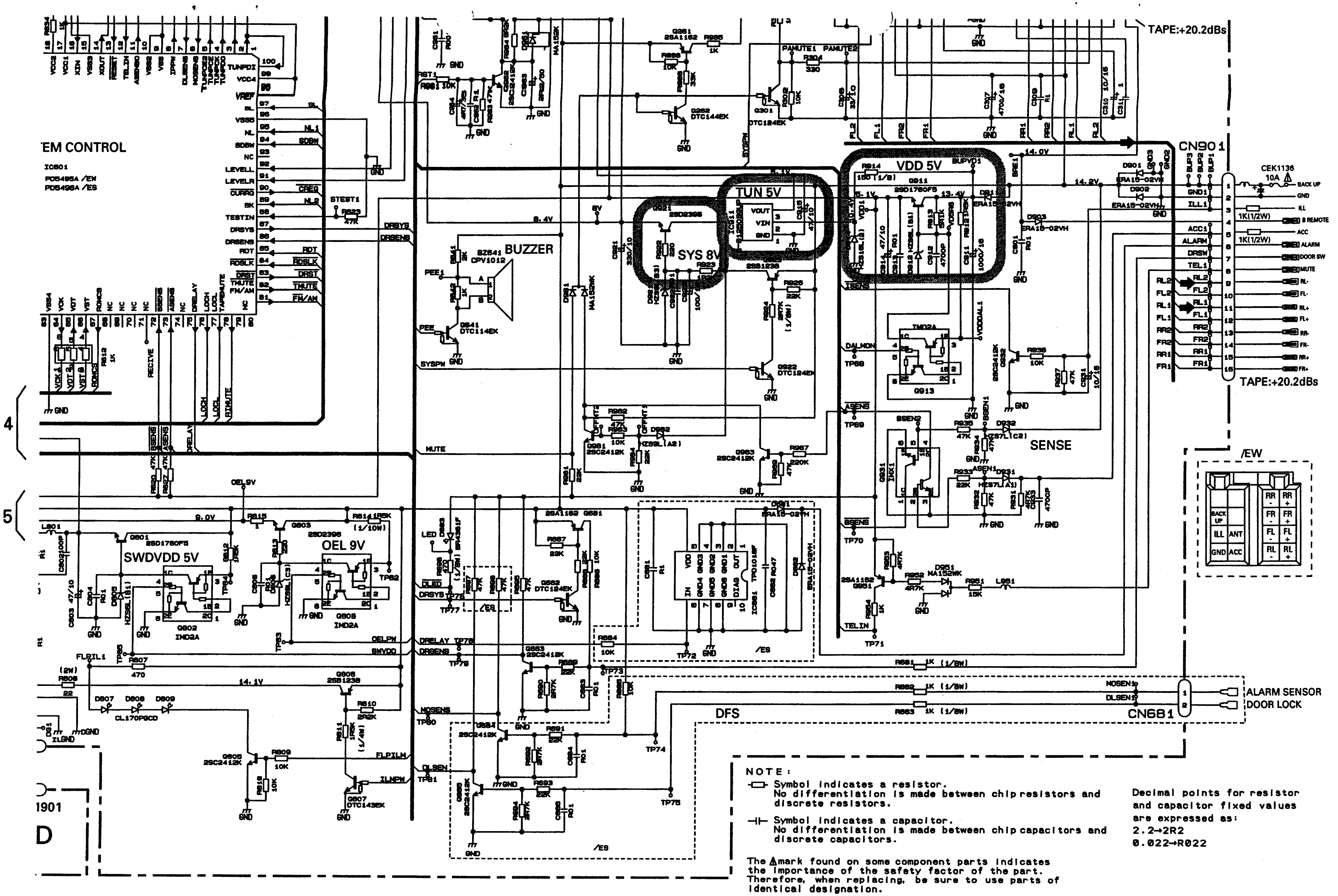
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

: The power supply is shown with the marked box.


1
2
3
E-VOL
IC203
PML004AF
TAPE
TAPE:-9dBs
IP-BUS:+2.2dBs
FM(100%):-16.5dBs
AM(30%):-27dBs
FM(100%):-20.5dBs
AM(30%):-31dBs
(/EW)
(/ES)
AGND
DGND
VDD
B.UP
SYSTB
IC631
/ES
TUNER
FM(100%):-26dBs
AM(30%):-26dBs
FM(100%):-30dBs
AM(30%):-30dBs
Q101 2SA1162
Q102 DTC124EK
Q402 2SC2412K
Q154 DTA114EK
Q153 IMH3A
Q401 2SC2412K
IP-BUS:+2.2dBs
IP-BUS DRIVER
IC101 CA0006AM
IP-BUS
CN101
0V
CN451
B FM/AM TUNER UNIT


A-b
A-a
4
5
SYSTEM CONT
IC601
PD5495A/EW
PD5495A/ES
C KEYBOARD UNIT
CN1901
CN801
CN902
D SWITCH PCB
CN851
S853
CSN1022
HALF LOADING SWITCH
S851
CSN1012
OPEN
CLOSE
M951
AUTOMATIC FLAP MOTOR
CXM1085
MOTOR DRIVE
IC851
BA6238FS
RDS DECODER
/EW
IC501
PM4005A
X501
CSB1447
OSC.F.
3.648MHz
TAPE: -9dBs
CASSETTE
CN651
CN251
E DECK UNIT
CN451
GND


A TUNER AMP UNIT
CN351
PRE. OUT
HIGH-OUT
IC271
PA2028A
POWER AMP
IC301
PAL005A
1.TAB
2.PW.GND2
3.RL-
4.STBY
5.FL+
6.VCC1/2
7.FR-
8.PW.GND1
9.FR+
10.SVR
11.FRIN
12.FLIN
13.S-GND
14.RLIN
15.RRIN
16.ACGND
17.RR+
18.PW.GND3
19.RR-
20.VCC3/4
21.RL+
22.MUTE
23.FL-
24.PW.GND4
25.B.REMOTE
TAPE:+20.2dBs
LEVEL INDICATOR
IC231
NJM4558MD
RESET
IC361
S-80735ANDZI
TAPE:-5.8dBs
B.UP
SYS+B
VDD
TAPE,TUNER,IP-BUS SIGNAL
TUNER SIGNAL
IP-BUS SIGNAL
TAPE SIGNAL
1
2
3


CN901
CEK1136 10A
BACK UP
GND
ILL
B REMOTE
ACC
ALARM
DOOR SW
MUTE
TAPE:+20.2dBs
VDD 5V
TUN 5V
SYS 8V
SENSE
BUZZER
BZ641 CPV1012
OEL 9V
SWDVDD 5V
DFS
CN681
ALARM SENSOR
DOOR LOCK
/EW
/ES
EM CONTROL
IC801
PD5495A /EW
PD5496A /ES
IC681 TPD1018F
4
5
D
1901

NOTE:

—▭— Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

—||— Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

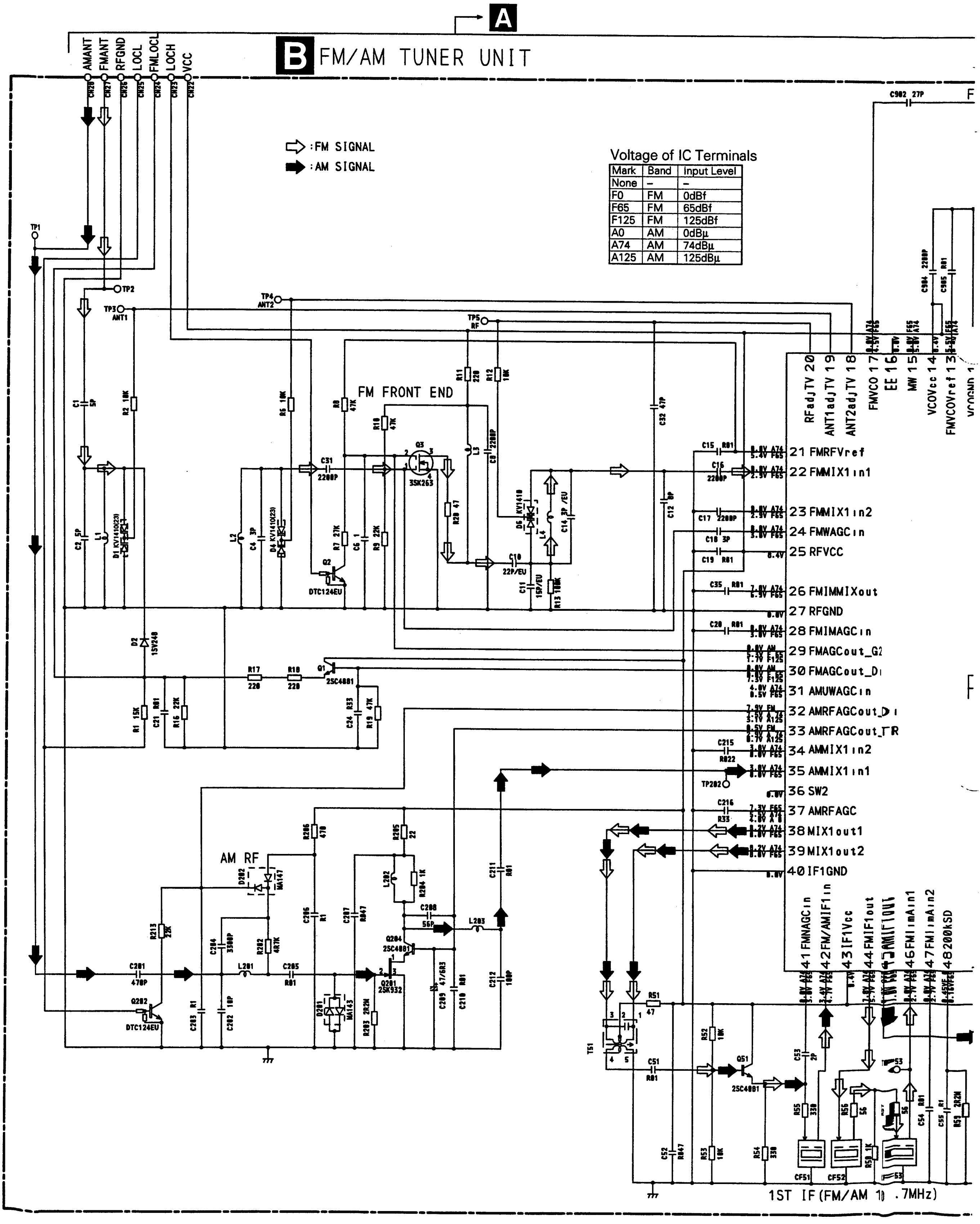
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

⬭ : The power supply is shown with the marked box.

A-a A-b

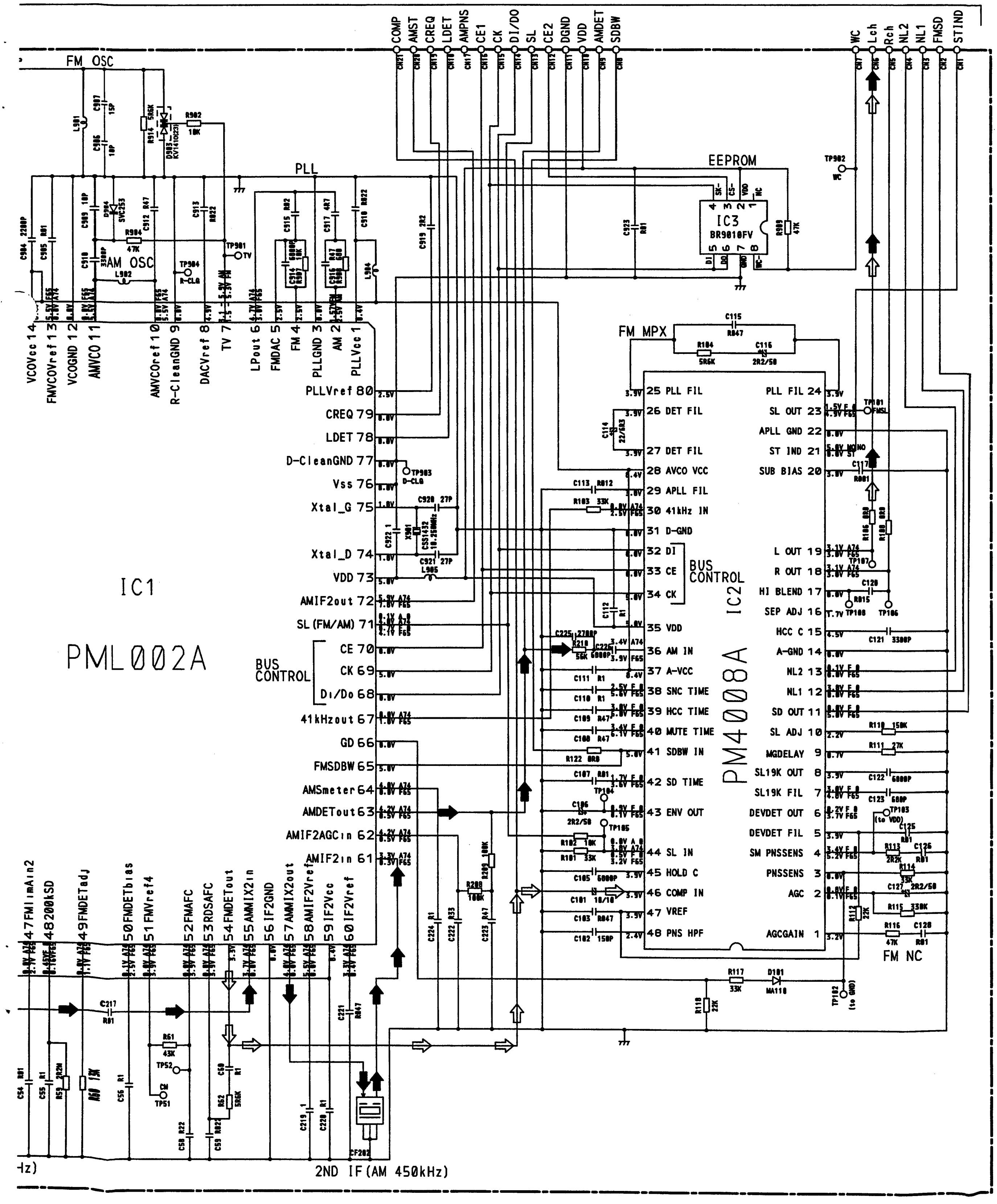
3.3 FM/AM TUNER UNIT

● KEH-P8800R/EW, KEH-P8800R-W/EW

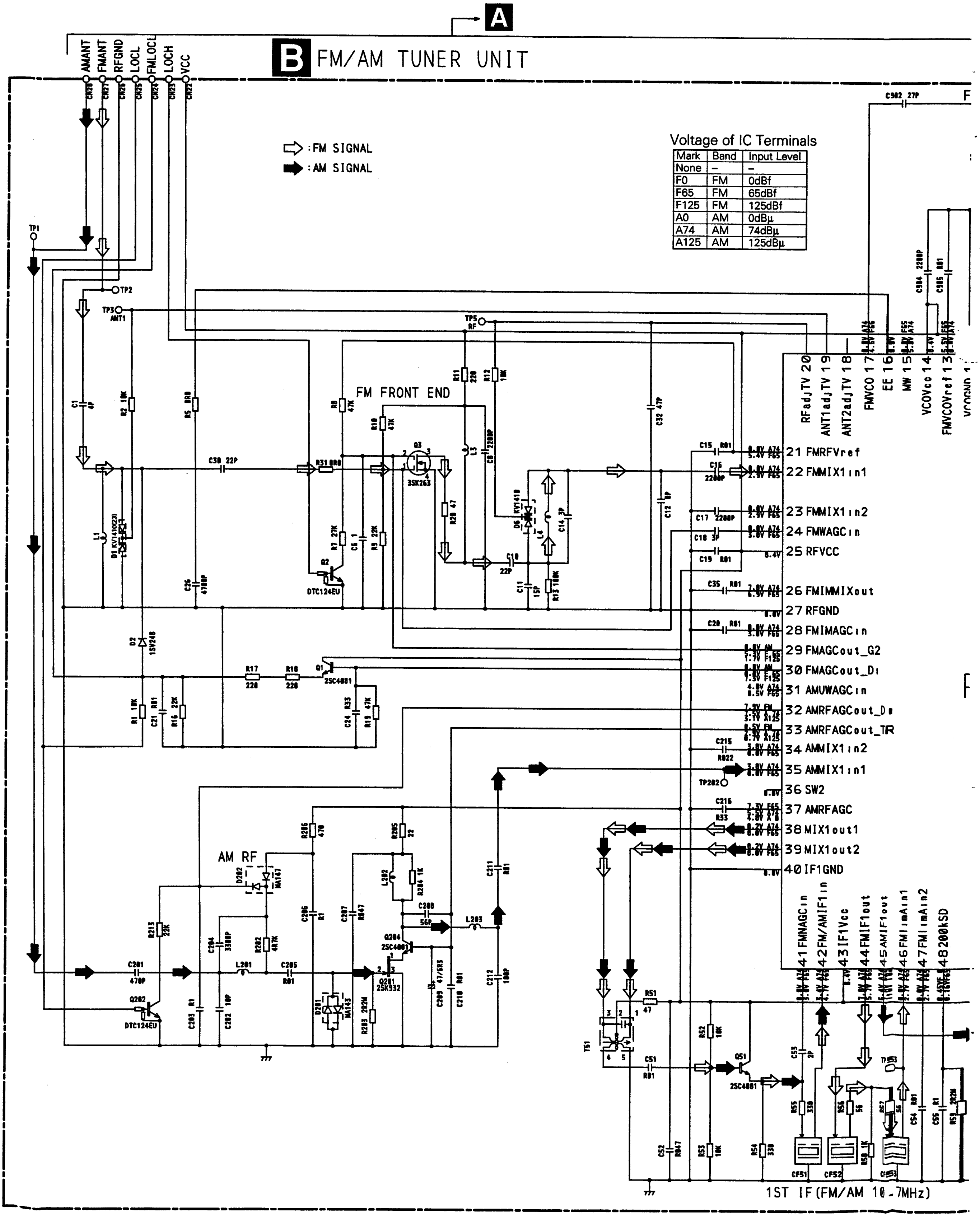

A
B FM/AM TUNER UNIT
AMANT
FMANT
RFGND
LOCL
FMLOCL
LOCH
VCC
CN28
CN27
CN26
CN25
CN24
CN23
CN22
:FM SIGNAL
:AM SIGNAL
TP1
TP2
TP3 ANT1
TP4 ANT2
TP5 RF
FM FRONT END
AM RF
3SK263
DTC124EU
2SC4081
2SK332
1SV240
KV1410
MA147
MA143
Q1
Q2
Q3
Q201
Q202
Q204
Q51
D1
D2
D4
D6
D201
D202
L1
L2
L3
L4
L201
L202
L203
TS1
CF51
CF52
CF53
C902 27P
20 RFadjTV
19 ANT1adjTV
18 ANT2adjTV
17 FMVCO
16 EE
15 MW
14 VCOVcc
13 FMVCOVref
21 FMRFVref
22 FMMIX1in1
23 FMMIX1in2
24 FMWAGCin
25 RFVCC
26 FMIMMIXout
27 RFGND
28 FMIMAGCin
29 FMAGCout_G2
30 FMAGCout_D
31 AMUWAGCin
32 AMRFAGCout_D
33 AMRFAGCout_TR
34 AMMIX1in2
35 AMMIX1in1
36 SW2
37 AMRFAGC
38 MIX1out1
39 MIX1out2
40 IF1GND
41 FMNAGCin
42 FM/AMIF1in
43 IF1Vcc
44 FMIF1out
46 FMlimAin1
47 FMlimAin2
48 200kSD
TP202
1ST IF(FM/AM 10.7MHz)

Voltage of IC Terminals

Mark	Band	Input Level
None	–	–
F0	FM	0dBf
F65	FM	65dBf
F125	FM	125dBf
A0	AM	0dBμ
A74	AM	74dBμ
A125	AM	125dBμ

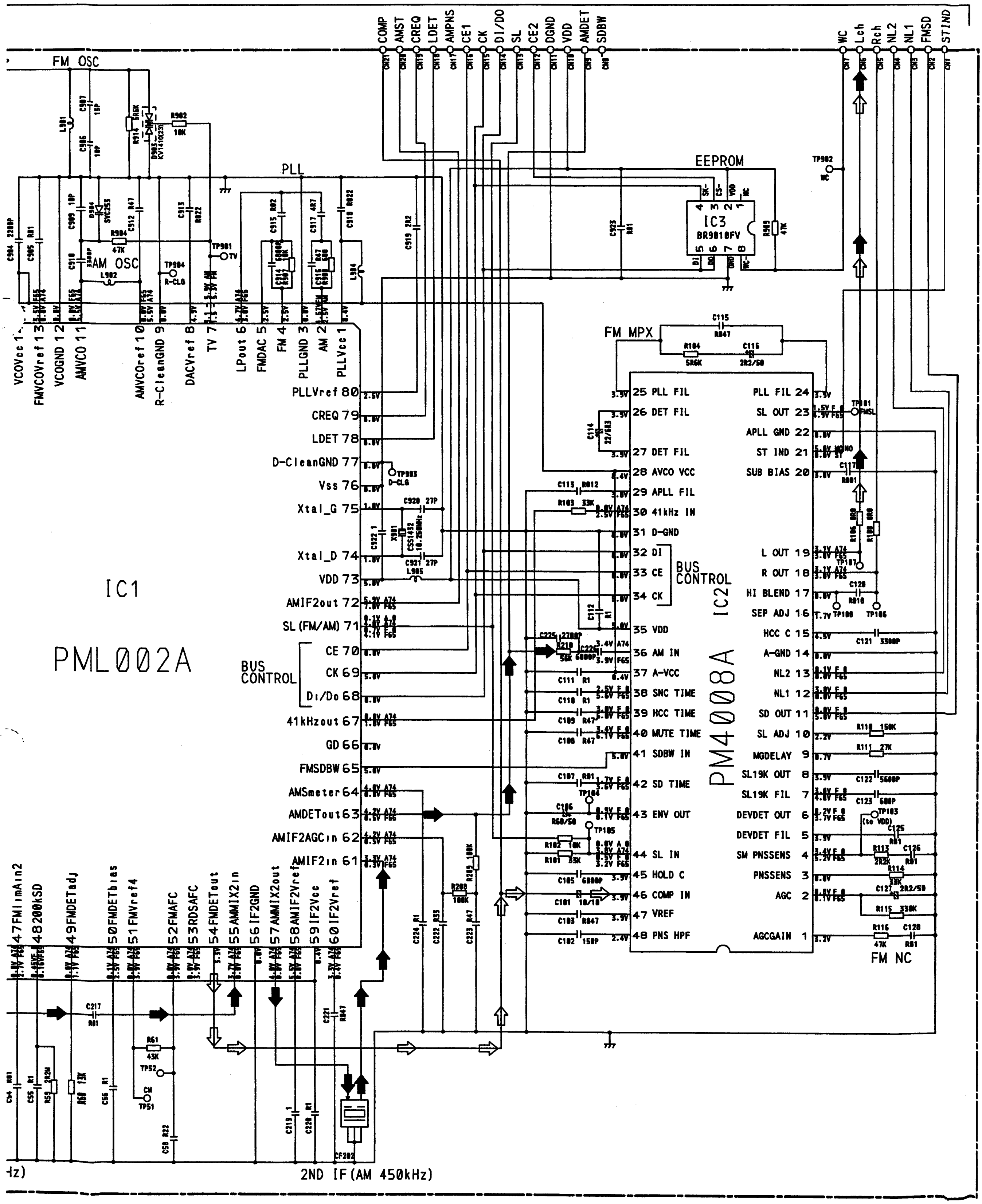

COMP
AMST
CREQ
LDET
AMPNS
CE1
CK
DI/DO
SL
CE2
DGND
VDD
AMDET
SDBW
WC
Lch
Rch
NL2
NL1
FMSD
STIND
FM OSC
L901
C907 15P
C906 10P
R914 5R6K
D903 KV1410(23)
R902 10K
PLL
AM OSC
C904 2200P
C905 R01
C909 10P
D904 SVC253
R904 47K
C912 R47
C910 3300P
L902
TP904 R-CLG
C913 R022
TP901 TV
C915 R82
C914 6800P
R907 10K
C917 4R7
C916 R47
R908 680
L904
C918 R022
C919 2R2
EEPROM
TP902 WC
IC3
BR9010FV
SK
CS
VDD
NC
DI
DO
GND
R909 47K
C923 R01
VCOVcc 14
FMVCOVref 13
VCOGND 12
AMVCO 11
AMVCOref 10
R-CleanGND 9
DACVref 8
TV 7
LPout 6
FMDAC 5
FM 4
PLLGND 3
AM 2
PLLVcc 1
PLLVref 80
CREQ 79
LDET 78
D-CleanGND 77
TP903 D-CLG
Vss 76
Xtal_G 75
C920 27P
X901 CSS1432 10.25MHz
C922 1
Xtal_D 74
C921 27P
L905
VDD 73
AMIF2out 72
SL (FM/AM) 71
CE 70
CK 69
Di/Do 68
BUS CONTROL
41kHzout 67
GD 66
FMSDBW 65
AMSmeter 64
AMDETout 63
AMIF2AGCin 62
AMIF2in 61
IC1
PML002A
47 FMlimAin2
48 200kSD
49 FMDETadj
50 FMDETbias
51 FMVref4
52 FMAFC
53 RDSAFC
54 FMDETout
55 AMMIX2in
56 IF2GND
57 AMMIX2out
58 AMIF2Vref
59 IF2Vcc
60 IF2Vref
FM MPX
C115 R047
R104 5R6K
C116 2R2/50
C114 22/6R3
25 PLL FIL
26 DET FIL
27 DET FIL
28 AVCO VCC
29 APLL FIL
30 41kHz IN
31 D-GND
32 DI
33 CE
34 CK
BUS CONTROL
35 VDD
36 AM IN
37 A-VCC
38 SNC TIME
39 HCC TIME
40 MUTE TIME
41 SDBW IN
42 SD TIME
43 ENV OUT
44 SL IN
45 HOLD C
46 COMP IN
47 VREF
48 PNS HPF
IC2
PM4008A
PLL FIL 24
SL OUT 23
APLL GND 22
ST IND 21
SUB BIAS 20
L OUT 19
R OUT 18
HI BLEND 17
SEP ADJ 16
HCC C 15
A-GND 14
NL2 13
NL1 12
SD OUT 11
SL ADJ 10
MGDELAY 9
SL19K OUT 8
SL19K FIL 7
DEVDET OUT 6
DEVDET FIL 5
SM PNSSENS 4
PNSSENS 3
AGC 2
AGCGAIN 1
TP101 FMSL
C117 R001
R106 8R0
R108 8R0
TP107
C120
R815
TP108
TP106
C121 3300P
R110 150K
R111 27K
C122 6800P
C123 680P
TP103 (to VDD)
C125 R01
R113 2R2K
C126 R01
R114 33K
C127 2R2/50
R115 330K
R112 22K
R116 47K
C128 R01
FM NC
C113 R012
R103 33K
C112 R1
C225 2700P
R210 56K
C226 6800P
C111 R1
C110 R1
C109 R47
C108 R47
R122 8R0
C107 R01
TP104
C106 2R2/50
TP105
R102 10K
R101 33K
C105 6800P
C101 10/10
C103 R047
C102 150P
R117 33K
D101 MA110
TP102 (to GND)
R118 22K
R208 100K
R209 100K
C224 R1
C222 R33
C223 R47
C217 R01
R51 43K
TP52
TP51
C54 R01
C55 R1
R59 2R2K
R60 15K
C56 R1
C58 R22
C59 R022
C50 R1
R52 5R6K
C219 1
C220 R1
C221 R047
CF202
2ND IF (AM 450kHz)

● KEH-P8850/ES


A
A
B FM/AM TUNER UNIT
AMANT
FMANT
RFGND
LOCL
FMLOCL
LOCH
VCC
CN28
CN27
CN26
CN25
CN24
CN23
CN22
:FM SIGNAL
:AM SIGNAL
TP1
TP2
TP3 ANT1
TP5 RF
FM FRONT END
AM RF
C1 4P
R2 10K
R5 0R0
C30 22P
R31 0R0
R8 47K
R10 47K
R11 220
R12 10K
Q3 3SK263
L3
C8 2200P
R20 47
C32 47P
D6 KV1410
C14 3P
C10 22P
C11 15P
R13 10K
C12 0P
L1
D1 KV1410(2/3)
C26 470P
R7 27K
C6 1
R9 22K
Q2 DTC124EU
D2 1SV240
R17 220
R18 220
Q1 2SC4081
R1 10K
C21 R01
R16 22K
C24 R33
R19 47K
R286 470
R285 22
L282
R284 1K
C280
56P
L283
C211 R01
C212 100P
D282 MA147
R213 22K
C284 3300P
R282 47K
C286 R1
C287 R047
Q284 2SC4081
Q281 2SK932
C289 47/6R3
C210 R01
C281 470P
L281
C285 R01
Q282 DTC124EU
C283 R1
C282 10P
D281 MA143
R283 2R2M
C15 R01
C16 2200P
C17 2200P
C18 3P
C19 R01
C35 R01
C20 R01
C215 R022
TP282
C216 R33
C902 27P
C904 2200P
C905 R01
T51
R51 47
C51 R01
R52 10K
R53 10K
Q51 2SC4081
R54 330
C52 R047
C53 2P
R55 330
R56 56
R57 56
R58 1K
C54 R01
C55 R1
R59 2R2M
CF51
CF52
CF53
TP53
1ST IF(FM/AM 10.7MHz)
RFadjTV 20
ANT1adjTV 19
ANT2adjTV 18
FMVCO 17
EE 16
MW 15
VCOVcc 14
FMVCOVref 13
VCOGND
21 FMRFVref
22 FMMIX1in1
23 FMMIX1in2
24 FMWAGCin
25 RFVCC
26 FMIMMIXout
27 RFGND
28 FMIMAGCin
29 FMAGCout_G2
30 FMAGCout_Di
31 AMUWAGCin
32 AMRFAGCout_Di
33 AMRFAGCout_TR
34 AMMIX1in2
35 AMMIX1in1
36 SW2
37 AMRFAGC
38 MIX1out1
39 MIX1out2
40 IF1GND
41 FMNAGCin
42 FM/AMIF1in
43 IF1Vcc
44 FMIF1out
45 AMIF1out
46 FMIimAin1
47 FMIimAin2
48 200kSD
8.4V
0.0V
F

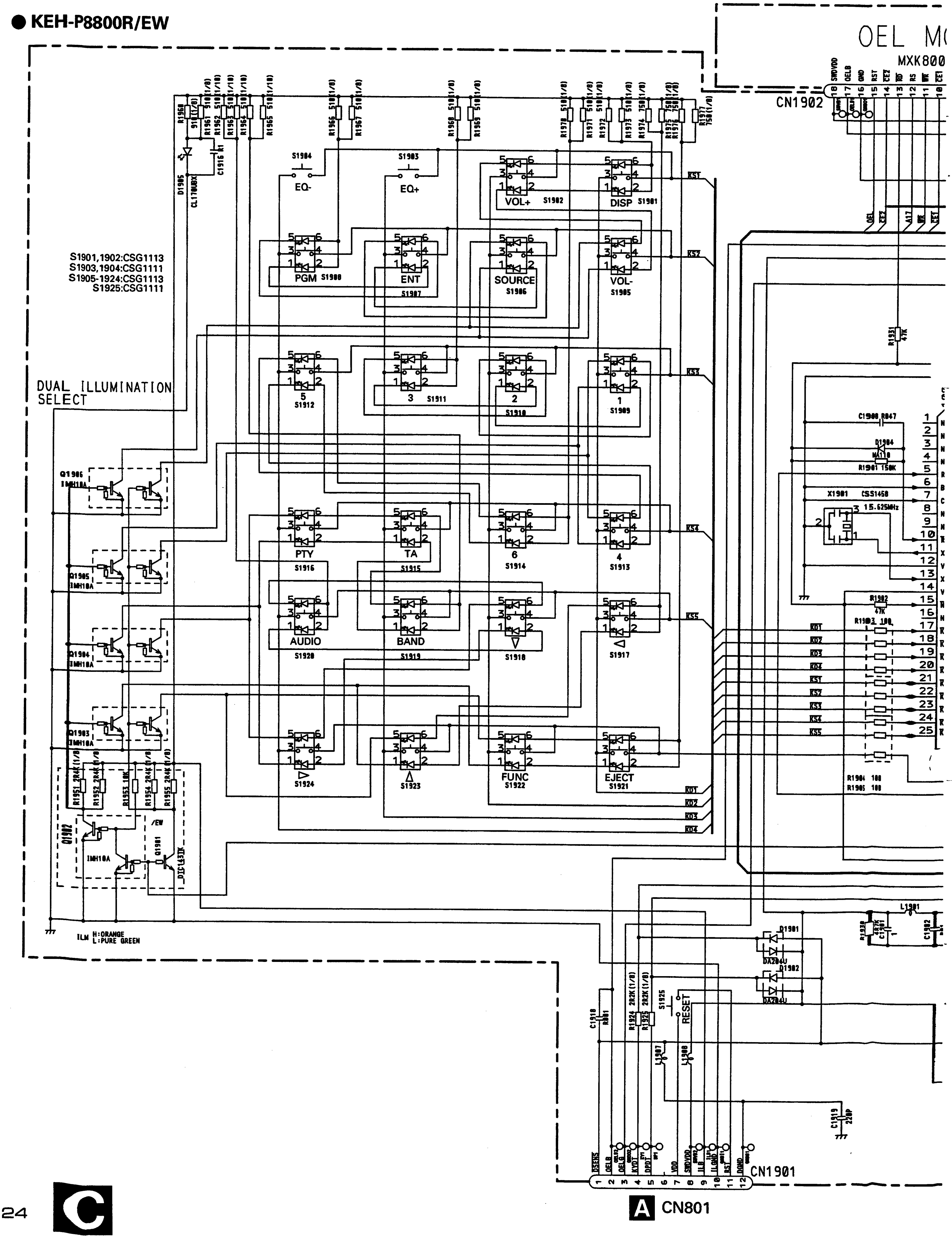
Voltage of IC Terminals

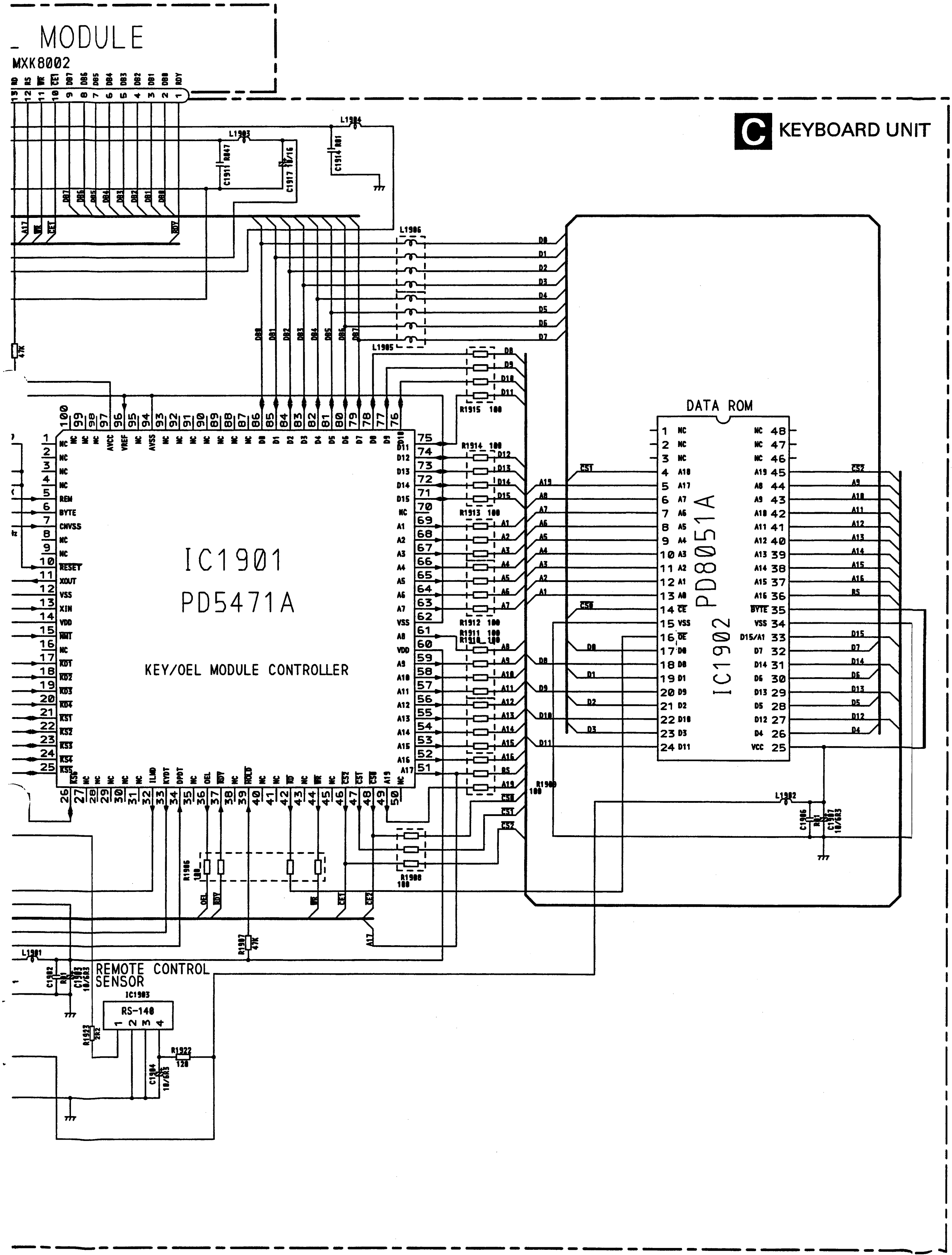
Mark	Band	Input Level
None	–	–
F0	FM	0dBf
F65	FM	65dBf
F125	FM	125dBf
A0	AM	0dBμ
A74	AM	74dBμ
A125	AM	125dBμ


FM OSC
AM OSC
PLL
EEPROM
IC3
BR9010FV
FM MPX
IC1
PML002A
IC2
PM4008A
BUS CONTROL
COMP
AMST
CREQ
LDET
AMPNS
CE1
CK
DI/DO
SL
CE2
DGND
VDD
AMDET
SDBW
WC
Lch
Rch
NL2
NL1
FMSD
STIND
VCOVcc 14
FMVCOVref 13
VCOGND 12
AMVCO 11
AMVCOref 10
R-CleanGND 9
DACVref 8
TV 7
LPout 6
FMDAC 5
FM 4
PLLGND 3
AM 2
PLLVcc 1
PLLVref 80
CREQ 79
LDET 78
D-CleanGND 77
Vss 76
Xtal_G 75
Xtal_D 74
VDD 73
AMIF2out 72
SL (FM/AM) 71
CE 70
CK 69
Di/Do 68
41kHzout 67
GD 66
FMSDBW 65
AMSmeter 64
AMDETout 63
AMIF2AGCin 62
AMIF2in 61
47FMlimAin2
48200kSD
49FMDETadj
50FMDETbias
51FMVref4
52FMAFC
53RDSAFC
54FMDETout
55AMMIX2in
56IF2GND
57AMMIX2out
58AMIF2Vref
59IF2Vcc
60IF2Vref
25 PLL FIL
26 DET FIL
27 DET FIL
28 AVCO VCC
29 APLL FIL
30 41kHz IN
31 D-GND
32 DI
33 CE
34 CK
35 VDD
36 AM IN
37 A-VCC
38 SNC TIME
39 HCC TIME
40 MUTE TIME
41 SDBW IN
42 SD TIME
43 ENV OUT
44 SL IN
45 HOLD C
46 COMP IN
47 VREF
48 PNS HPF
PLL FIL 24
SL OUT 23
APLL GND 22
ST IND 21
SUB BIAS 20
L OUT 19
R OUT 18
HI BLEND 17
SEP ADJ 16
HCC C 15
A-GND 14
NL2 13
NL1 12
SD OUT 11
SL ADJ 10
MGDELAY 9
SL19K OUT 8
SL19K FIL 7
DEVDET OUT 6
DEVDET FIL 5
SM PNSSENS 4
PNSSENS 3
AGC 2
AGCGAIN 1
FM NC
TP901 TV
TP902 WC
TP903 D-CLG
TP904 R-CLG
TP51
TP52
X901
CF202
Hz)
2ND IF(AM 450kHz)

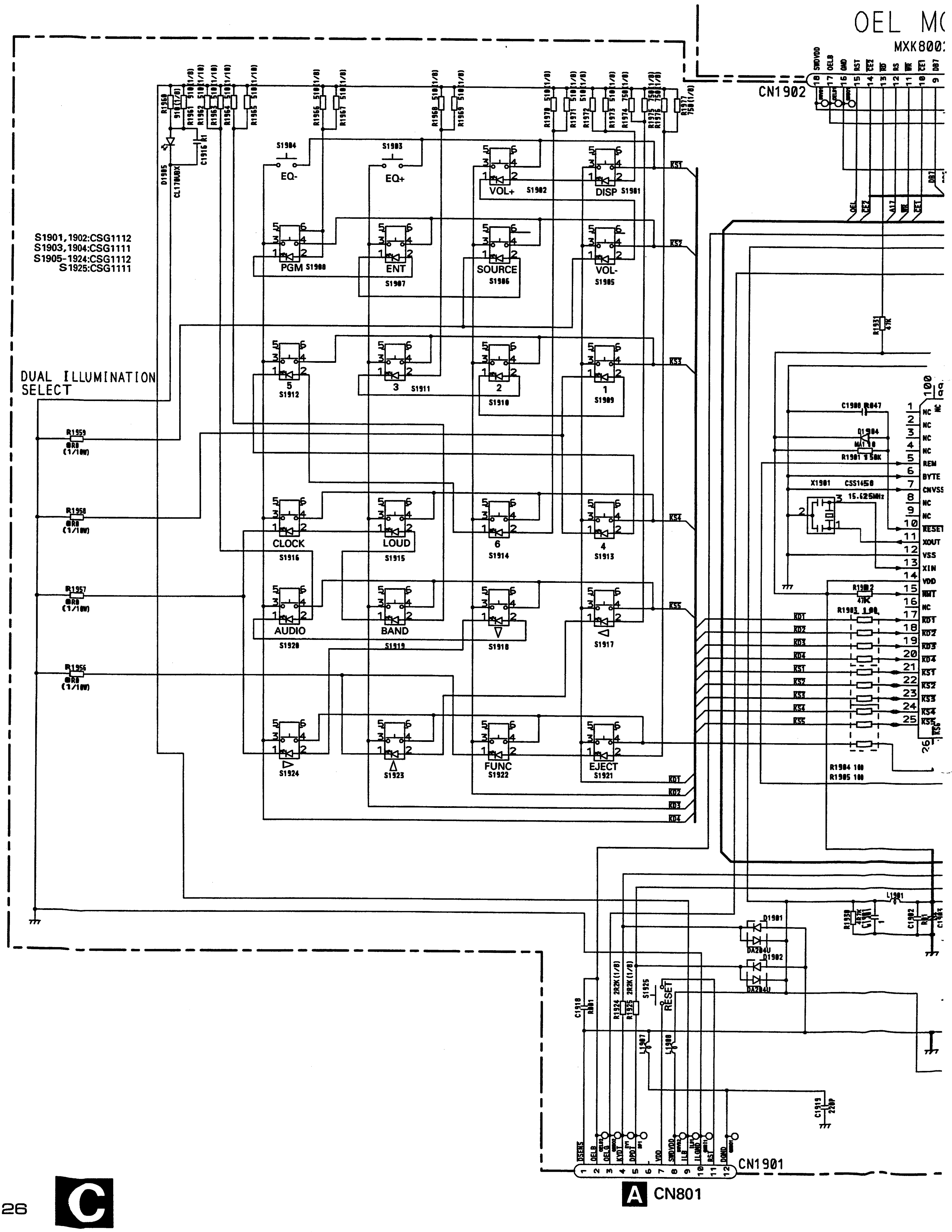
3.4 KEYBOARD UNIT

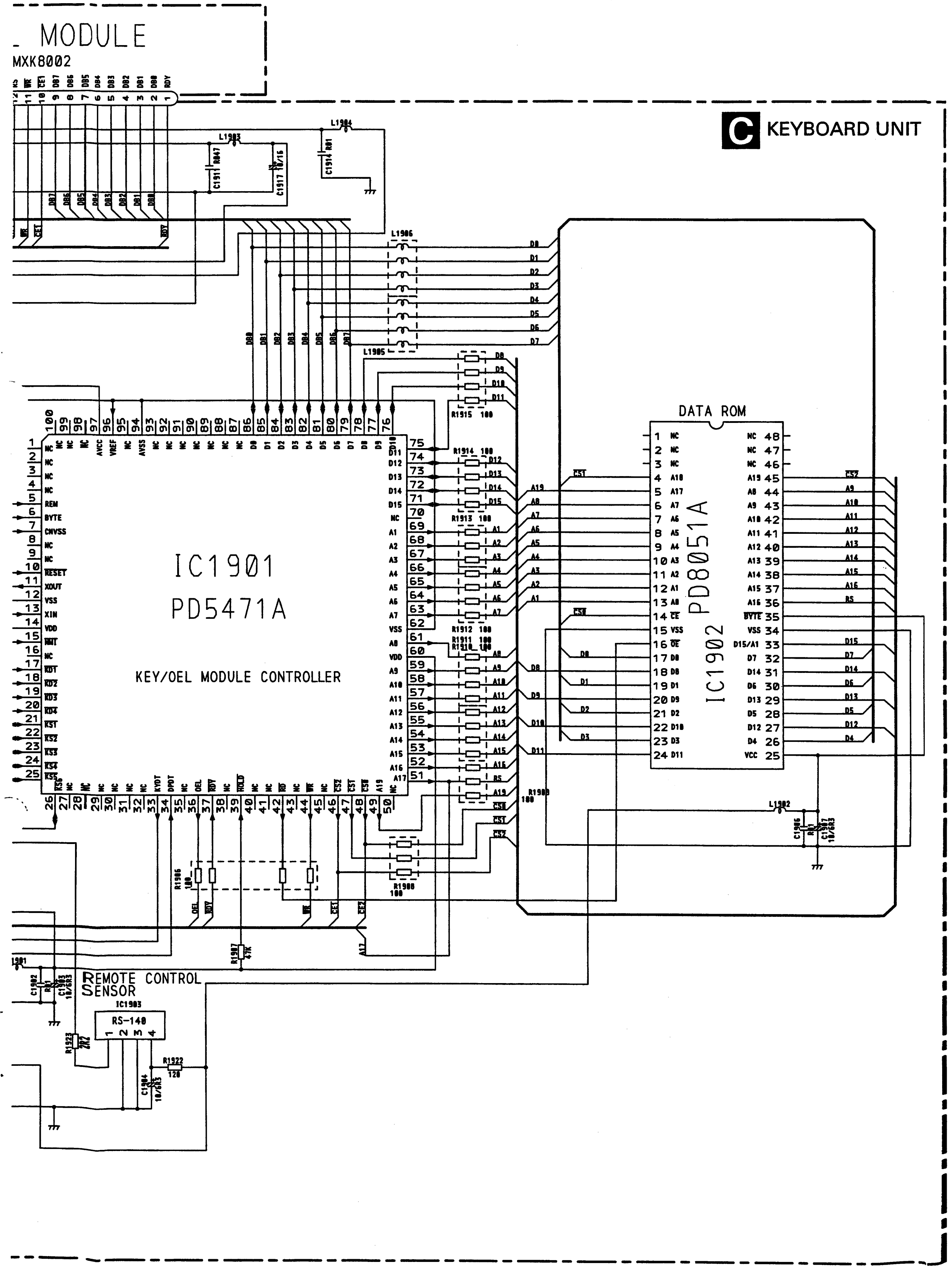
● KEH-P8800R/EW


OEL MODULE
MXK800
CN1902
S1901,1902:CSG1113
S1903,1904:CSG1111
S1905-1924:CSG1113
S1925:CSG1111
DUAL ILLUMINATION SELECT
EQ-
EQ+
S1904
S1903
VOL+ S1902
DISP S1901
PGM S1908
ENT S1907
SOURCE S1906
VOL- S1905
5 S1912
3 S1911
2 S1910
1 S1909
PTY S1916
TA S1915
6 S1914
4 S1913
AUDIO S1920
BAND S1919
S1918
S1917
S1924
S1923
FUNC S1922
EJECT S1921
KS1
KS2
KS3
KS4
KS5
KD1
KD2
KD3
KD4
Q1906 IMH10A
Q1905 IMH10A
Q1904 IMH10A
Q1903 IMH10A
Q1902 IMH10A
Q1901 DTC143TK
/EW
D1905 CL170UBX
C1916
ILM H:ORANGE L:PURE GREEN
R1951 2R4K
R1952 2R4K
R1953 10K
R1954 2R4K
R1955 2R4K
R1931 47K
C1900 R047
D1904 MA110
R1901 150K
X1901 CSS1450 15.625MHz
R1902 47K
R1903 100
R1904 100
R1905 100
L1901
D1901 DA204U
D1902 DA204U
S1925 RESET
R1924 2R2K
R1925 2R2K
L1907
L1908
C1918
C1919 220P
DSENS OELB OELG KYDT DPDT VDD SWDVDD ILB ILGND RST DGND
1 2 3 4 5 6 7 8 9 10 11 12
CN1901
A CN801

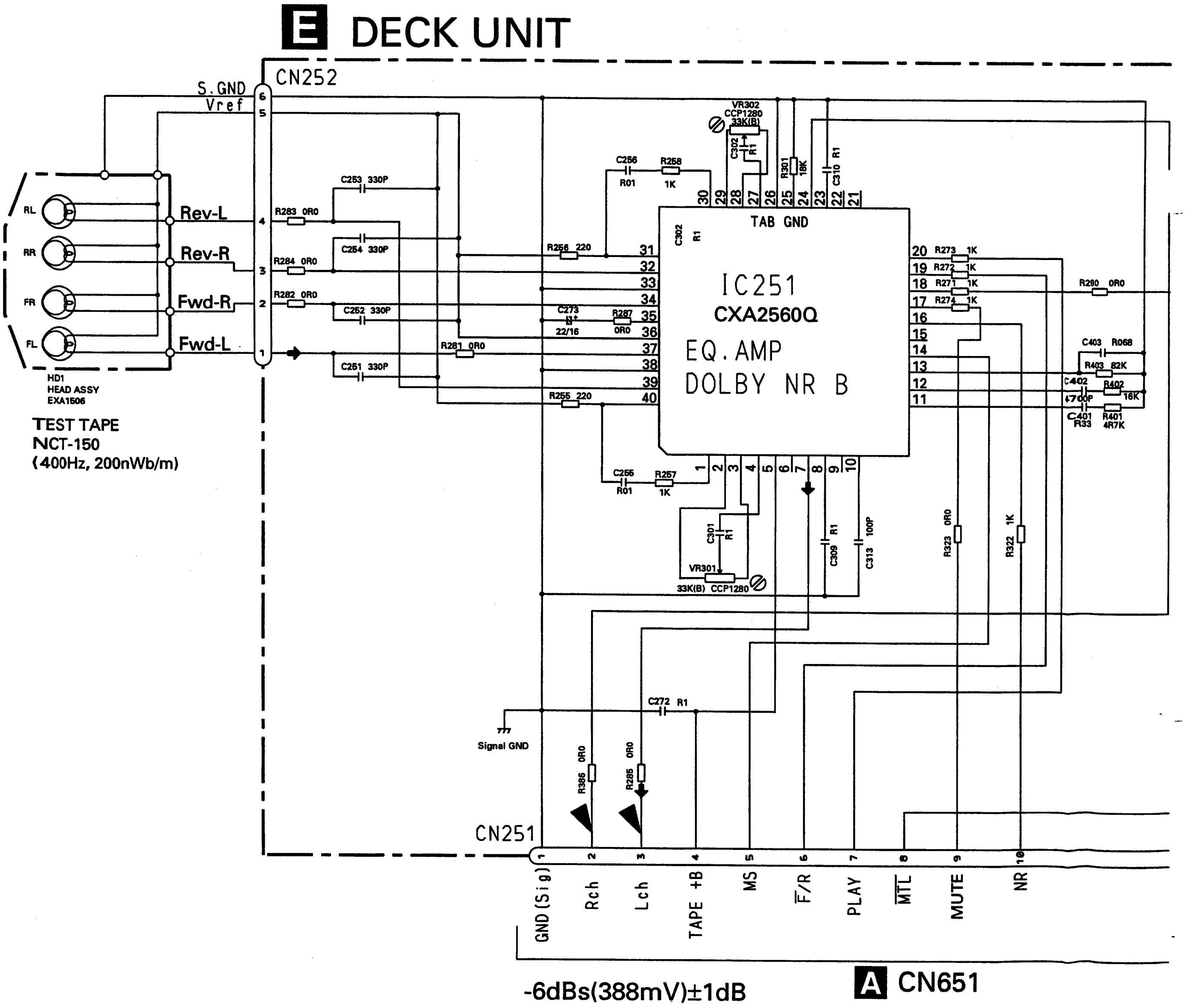

MODULE
MXK8002
C KEYBOARD UNIT
L1903
L1904
C1911
R847
C1917 10/16
C1914
R81
L1906
L1905
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
R1915 100
R1914 100
R1913 100
R1912 100
R1911 100
R1910 100
R1909 100
R1908 100
R1906 100
R1907 47K
47K
IC1901
PD5471A
KEY/OEL MODULE CONTROLLER
DATA ROM
IC1902
PD8051A
CS1
CS2
CS0
OEL
RDY
WR
CE1
CE2
A17
L1901
L1902
C1902
C1903 10/6R3
C1906
C1907 10/6R3
REMOTE CONTROL SENSOR
IC1903
RS-140
R1923 2R2
R1922 120
C1904 10/6R3

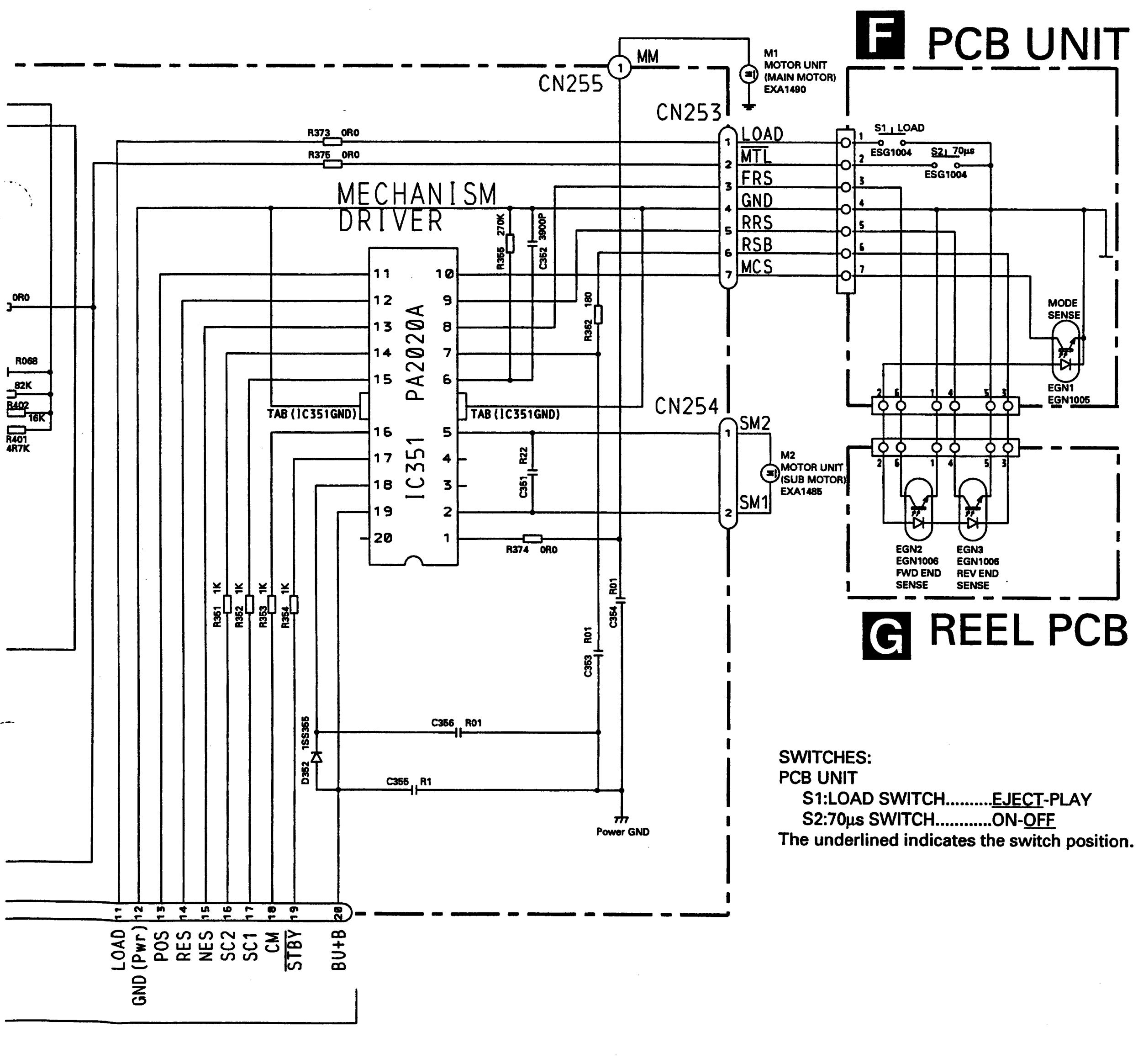
● KEH-P8850/ES


OEL MC
MXK800
CN1902
SWDVDD
OELB
GND
RST
CE2
RD
RS
WR
CE1
DB7
S1901,1902:CSG1112
S1903,1904:CSG1111
S1905-1924:CSG1112
S1925:CSG1111
DUAL ILLUMINATION SELECT
R1960
R1961 510(1/10)
R1962 510(1/10)
R1963 510(1/10)
R1964 510(1/10)
R1965 510(1/10)
R1966 510(1/8)
R1967 510(1/8)
R1968 510(1/8)
R1969 510(1/8)
R1970 510(1/8)
R1971 510(1/8)
R1972 510(1/8)
R1973 510(1/8)
R1974 750(1/8)
R1975 750(1/8)
R1976 750(1/8)
R1977 750(1/8)
D1905 CL170UBX
C1916
S1904 EQ-
S1903 EQ+
VOL+ S1902
DISP S1901
PGM S1908
ENT S1907
SOURCE S1906
VOL- S1905
5 S1912
3 S1911
2 S1910
1 S1909
CLOCK S1916
LOUD S1915
6 S1914
4 S1913
AUDIO S1920
BAND S1919
▽ S1918
◁ S1917
▷ S1924
△ S1923
FUNC S1922
EJECT S1921
KS1
KS2
KS3
KS4
KS5
KD1
KD2
KD3
KD4
R1959 0R0 (1/10W)
R1958 0R0 (1/10W)
R1957 0R0 (1/10W)
R1956 0R0 (1/10W)
R1931 47K
C1908 R047
D1904
R1901 150K
X1901 CSS1450 15.625MHz
R1902 47K
R1903 100
R1904 100
R1905 100
NC
REM
BYTE
CNVSS
RESET
XOUT
VSS
XIN
VDD
D1901 DA204U
D1902 DA204U
L1901
R1930
C1901
C1902
C1903
C1918 R801
R1924 2R2K(1/8)
R1925 2R2K(1/8)
S1925 RESET
L1907
L1908
C1919 220P
DSENS
OELB
KYDT
DPDT
VDD
SWDVDD
ILB
ILGND
RST
DGND
CN1901
A CN801


MODULE
MXK8002
C KEYBOARD UNIT
L1904
L1903
C1911
R847
C1917 10/16
C1914
R01
L1906
L1905
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
R1915 100
R1914 100
R1913 100
R1912 100
R1911 100
R1910 100
R1909 100
R1908 100
DATA ROM
IC1901
PD5471A
KEY/OEL MODULE CONTROLLER
IC1902
PD8051A
L1902
C1906
C1907 10/6R3
R1906 100
R1907 47K
REMOTE CONTROL SENSOR
IC1903
RS-140
R1922 120
R1923
C1904 10/6R3
C1902
C1903 10/6R3

3.5 DECK UNIT


E DECK UNIT
CN252
S.GND
Vref
6
5
4
3
2
1
RL
RR
FR
FL
Rev-L
Rev-R
Fwd-R
Fwd-L
HD1
HEAD ASSY
EXA1506
TEST TAPE
NCT-150
(400Hz, 200nWb/m)
R283 0R0
R284 0R0
R282 0R0
R281 0R0
C253 330P
C254 330P
C252 330P
C251 330P
C256 R01
R258 1K
R256 220
R255 220
C273 22/16
R287 0R0
C255 R01
R257 1K
VR302 CCP1280 33K(B)
C302 R1
R301 18K
C310 R1
VR301 33K(B) CCP1280
C301 R1
C309 R1
C313 100P
TAB GND
IC251
CXA2560Q
EQ.AMP
DOLBY NR B
R273 1K
R272 1K
R271 1K
R274 1K
R280 0R0
C403 R068
R403 82K
C402 4700P
R402 16K
C401 R33
R401 4R7K
R323 0R0
R322 1K
C272 R1
Signal GND
R386 0R0
R285 0R0
CN251
GND(Sig)
Rch
Lch
TAPE +B
MS
F/R
PLAY
MTL
MUTE
NR
-6dBs(388mV)±1dB
A CN651


F PCB UNIT
G REEL PCB
MECHANISM DRIVER
IC351 PA2020A
CN255
CN253
CN254
MM
M1 MOTOR UNIT (MAIN MOTOR) EXA1490
M2 MOTOR UNIT (SUB MOTOR) EXA1485
LOAD
MTL
FRS
GND
RRS
RSB
MCS
SM2
SM1
S1 LOAD ESG1004
S2 70µs ESG1004
MODE SENSE
EGN1 EGN1005
EGN2 EGN1006 FWD END SENSE
EGN3 EGN1006 REV END SENSE
TAB (IC351GND)
R373 0R0
R376 0R0
R355 270K
C352 3900P
R362 180
C351 R22
R374 0R0
R351 1K
R352 1K
R353 1K
R354 1K
C353 R01
C354 R01
C356 R01
C355 R1
D352 1SS355
Power GND
0R0
R068
82K
R402
16K
R401 4R7K
LOAD
GND (Pwr)
POS
RES
NES
SC2
SC1
CM
STBY
BU+B

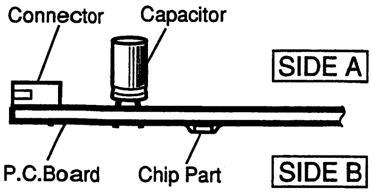
SWITCHES:
PCB UNIT
S1:LOAD SWITCH..........EJECT-PLAY
S2:70µs SWITCH............ON-OFF
The underlined indicates the switch position.

4. PCB CONNECTION DIAGRAM

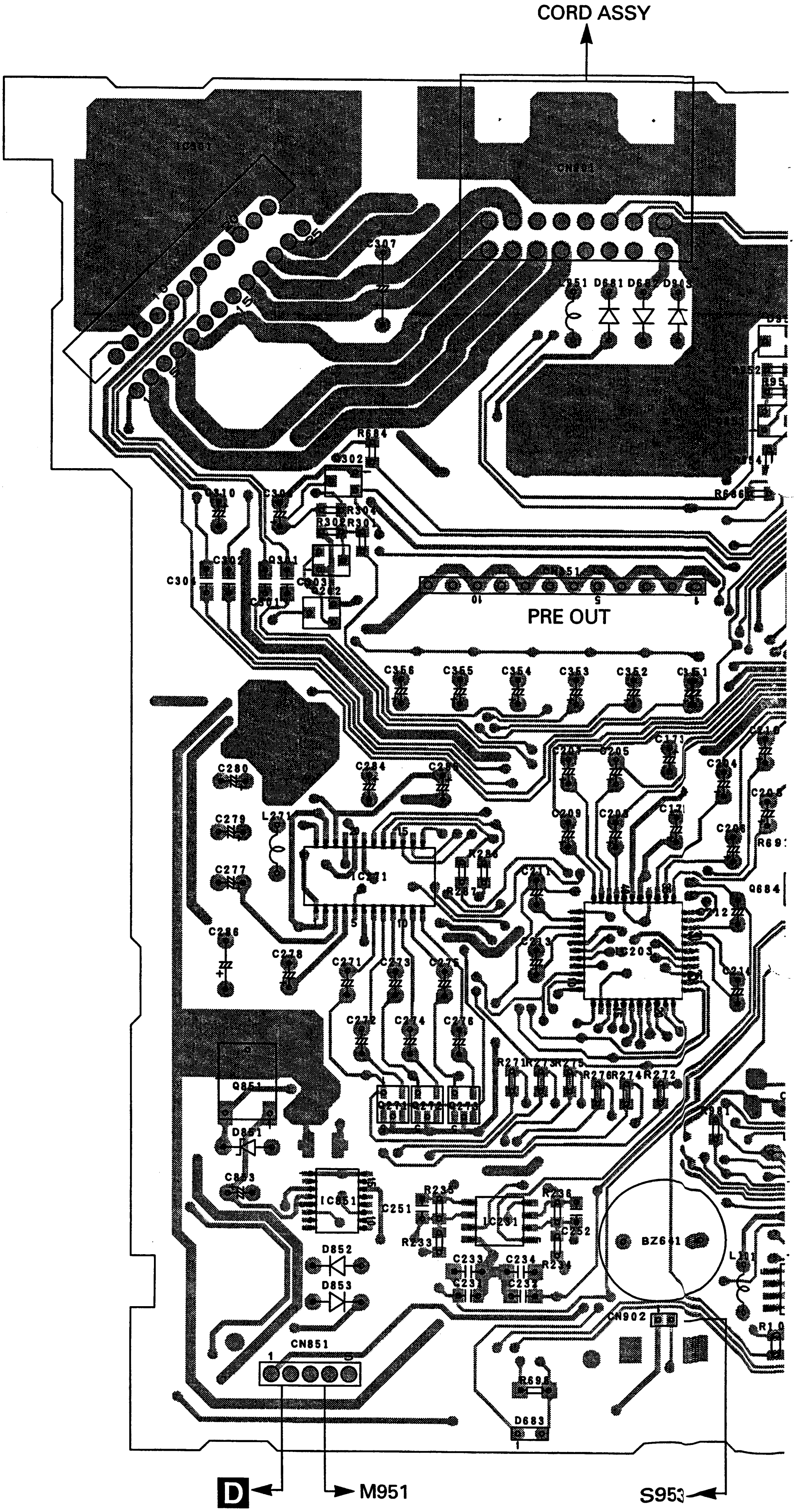
4.1 TUNER AMP UNIT

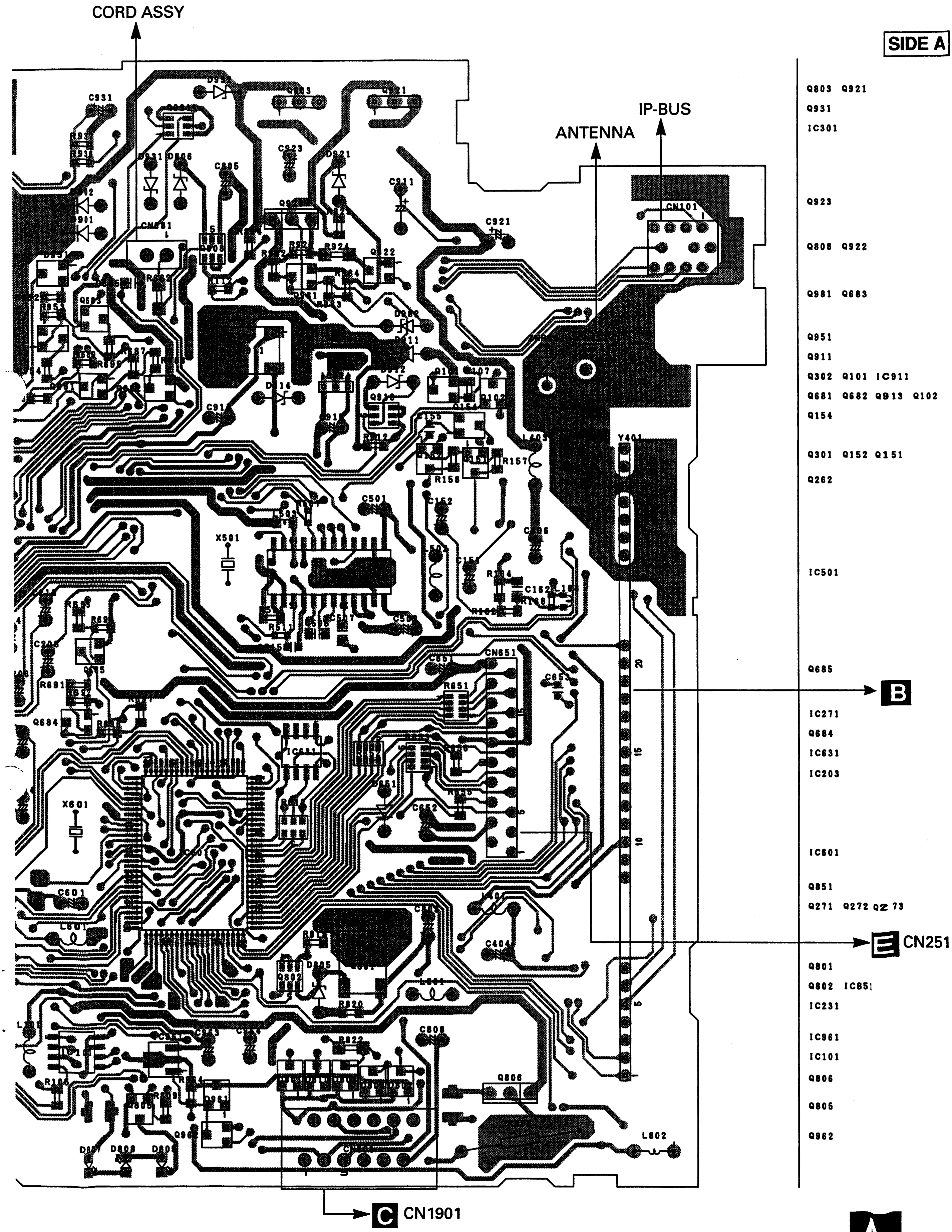
NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams


Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

A TUNER AMP UNIT


CORD ASSY
IC301
CN901
C307
L251
D681
D682
D683
R684
Q302
C310
R303
R302
R301
C302
Q311
C303
C304
C301
C262
CN351
PRE OUT
10
5
1
C356
C355
C354
C353
C352
C351
C173
C280
C284
C207
C205
C204
C279
L271
C209
C208
C171
C206
R69
C277
15
R286
IC271
C211
Q684
R287
C286
C278
C271
C273
C275
C213
IC203
C272
C274
C276
R271
R273
R275
R276
R274
R272
Q851
D851
C853
IC851
C251
R231
R232
R233
IC231
C252
BZ641
D852
D853
C233
C234
C231
C232
R234
CN902
CN851
1
5
R691
D683
D
M951
S953


CORD ASSY
SIDE A
ANTENNA
IP-BUS
CN101
Y401
X501
X601
C501
C152
C151
C162
R157
R158
L403
CN651
R651
C651
C653
C652
D651
IC631
C601
L601
C404
L401
L801
L802
C808
R822
R820
D805
Q802
R814
Q806
D961
Q962
C931
C921
C911
C923
C905
D921
D931
D906
D901
D902
Q921
Q922
Q923
R924
Q107
Q102
Q154
Q910
D911
D912
D914
D982
R691
R692
Q684
Q685
R106
B
E CN251
C CN1901
Q803 Q921
Q931
IC301
Q923
Q808 Q922
Q981 Q683
Q951
Q911
Q302 Q101 IC911
Q681 Q682 Q913 Q102
Q154
Q301 Q152 Q151
Q262
IC501
Q685
IC271
Q684
IC631
IC203
IC601
Q851
Q271 Q272 Q273
Q801
Q802 IC851
IC231
IC961
IC101
Q806
Q805
Q962

A TUNER AMP UNIT

Q932

IC681

Q352 Q353 Q354 Q355 Q356

Q153 Q261 Q351

Q401

Q983

Q501

Q155

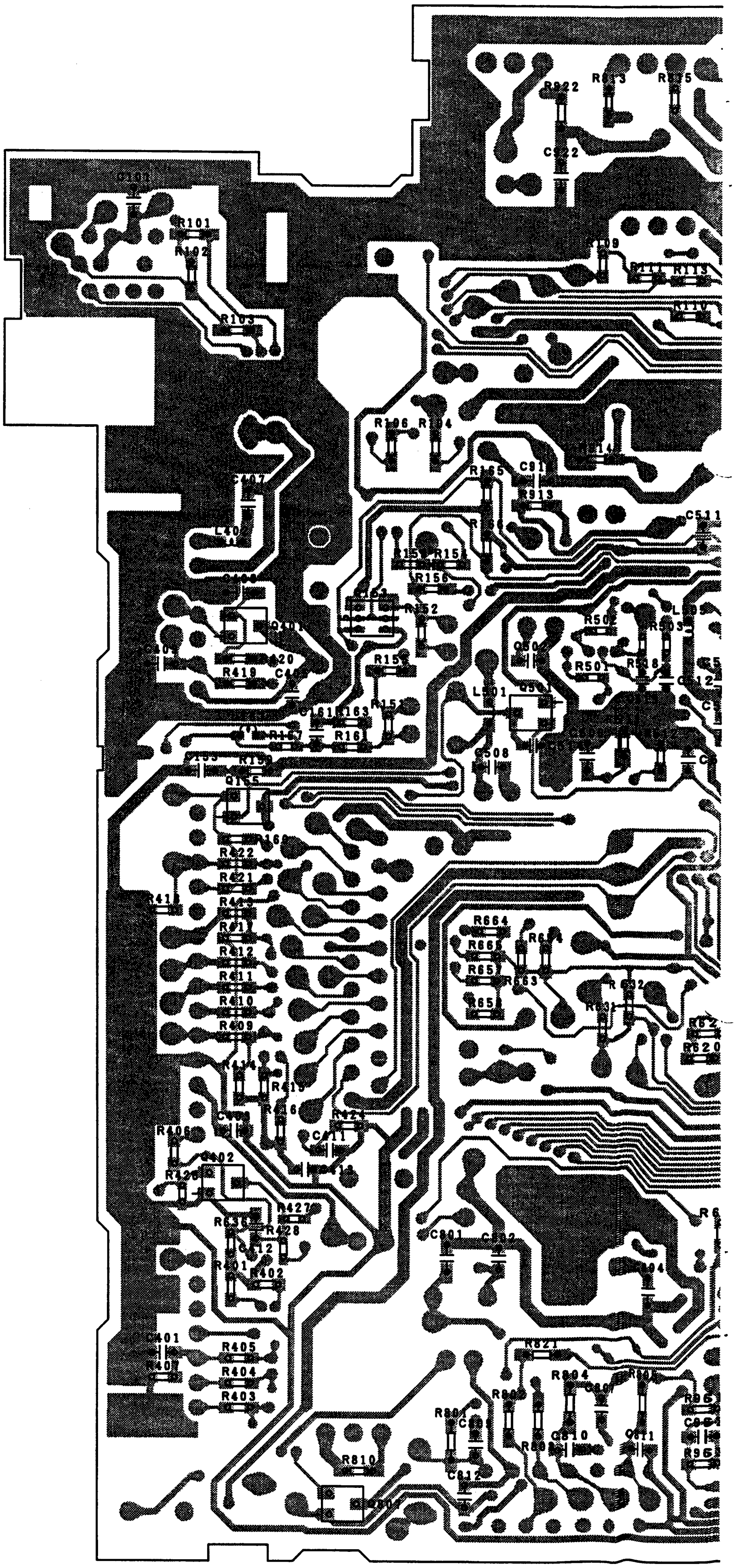
Q852

Q402

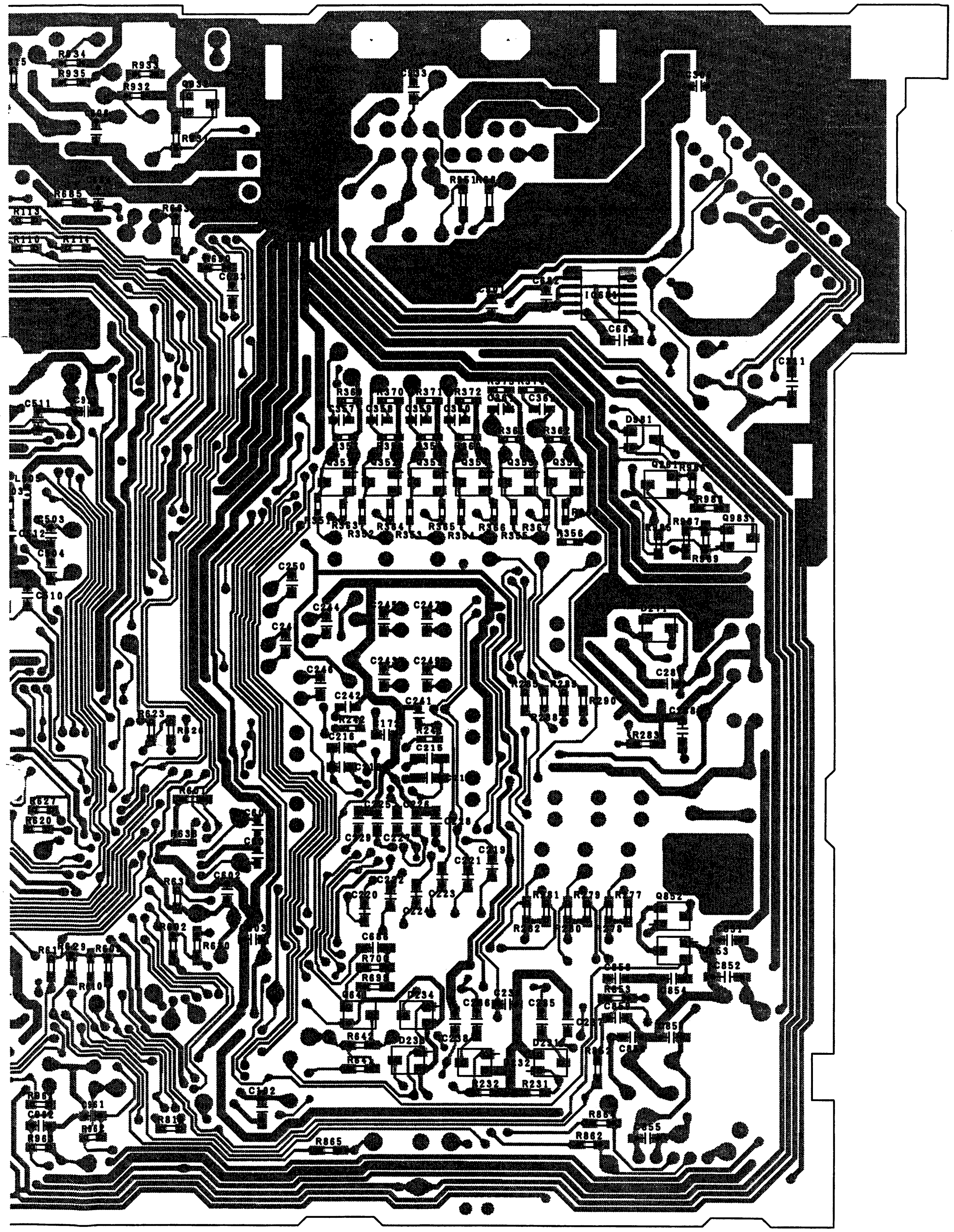
Q853

Q641

Q807

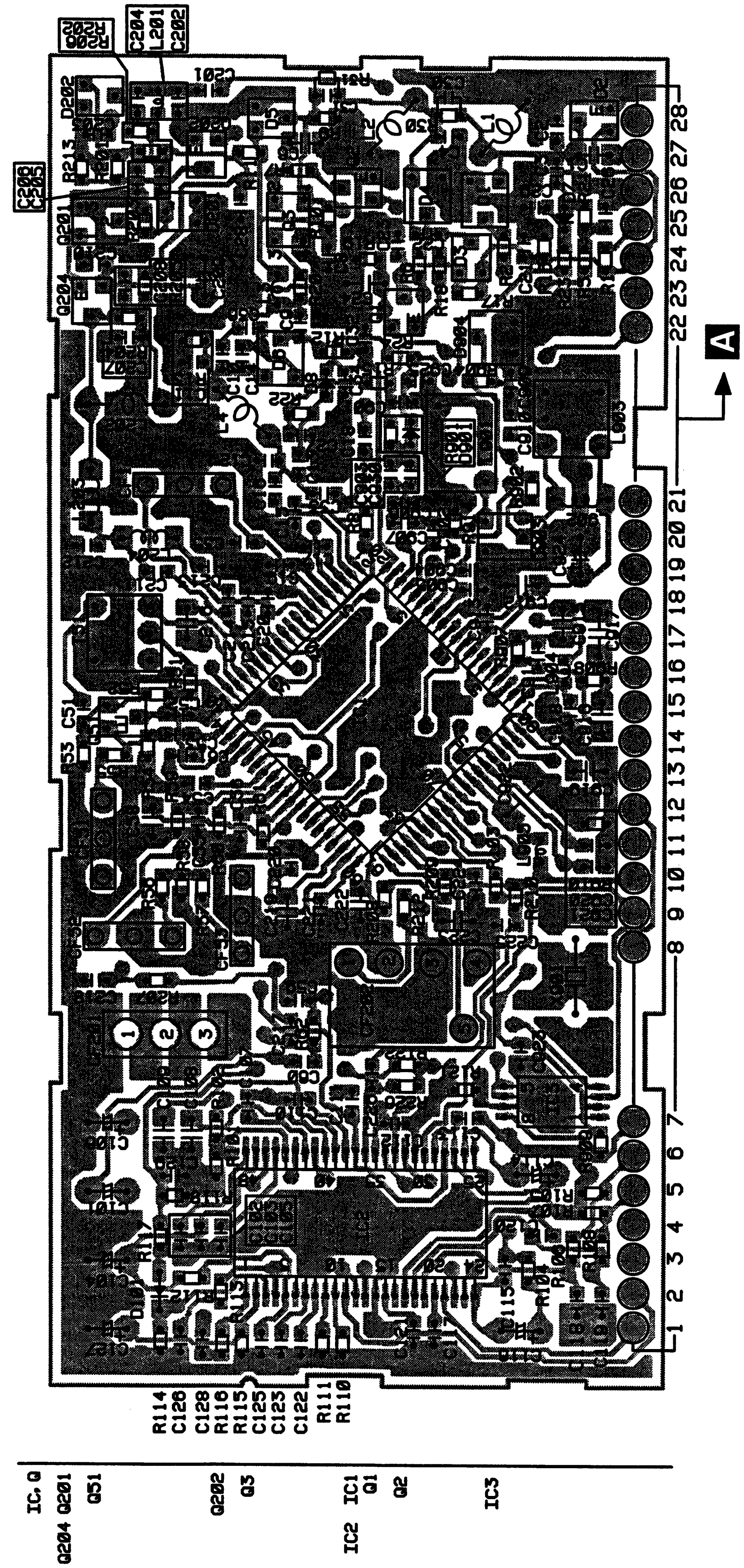

R922
R913
R915
C922
Q101
R101
R102
R109
R111
R113
R103
R110
R106
R104
R914
C407
R155
C91
R913
L401
C511
R151
R156
Q403
R152
R502
R503
Q401
Q502
R420
R419
R153
R501
R518
L501
C508
C161
R163
R157
R161
R159
Q155
R160
R422
R421
R418
R413
R412
R411
R410
R409
R664
R666
R665
R663
R652
R631
R620
R414
R415
R406
C411
Q402
R427
R428
C412
R401
R402
C801
C802
R804
C401
R405
R404
R403
R821
R808
R803
R804
Q810
Q811
R810
C812

SIDE B



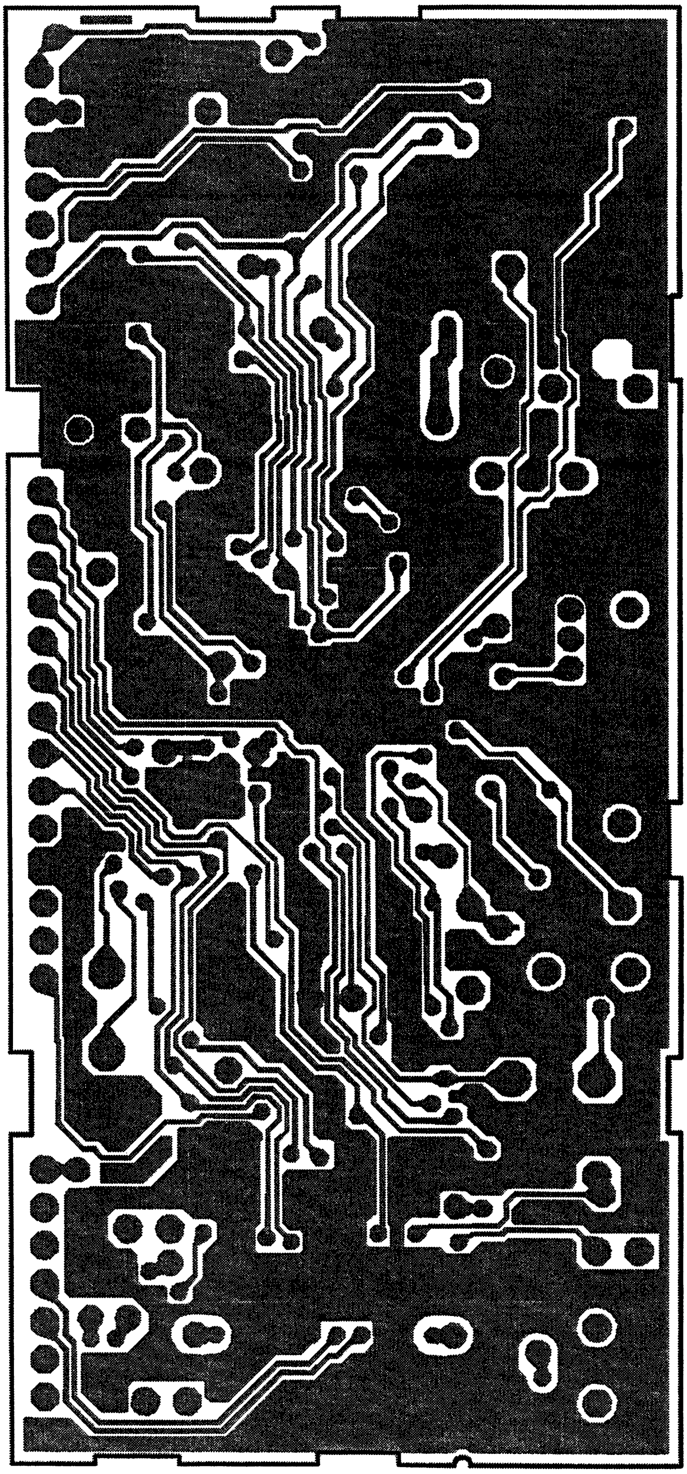
4.2 FM/AM TUNER UNIT

SIDE A


R206
R202
C204
L201
C202
C206
C205
D202
R213
Q201
Q204
C201
C51
R53
28 27 26 25 24 23 22
A
21 20 19 18 17 16 15 14 13 12 11 10 9 8
7 6 5 4 3 2 1
R114
C126
C128
R116
R115
C125
C123
C122
R111
R110
IC, Q
Q201
Q204
Q51
Q202
Q3
IC1
IC2
Q1
Q2
IC3

B FM/AM TUNER UNIT

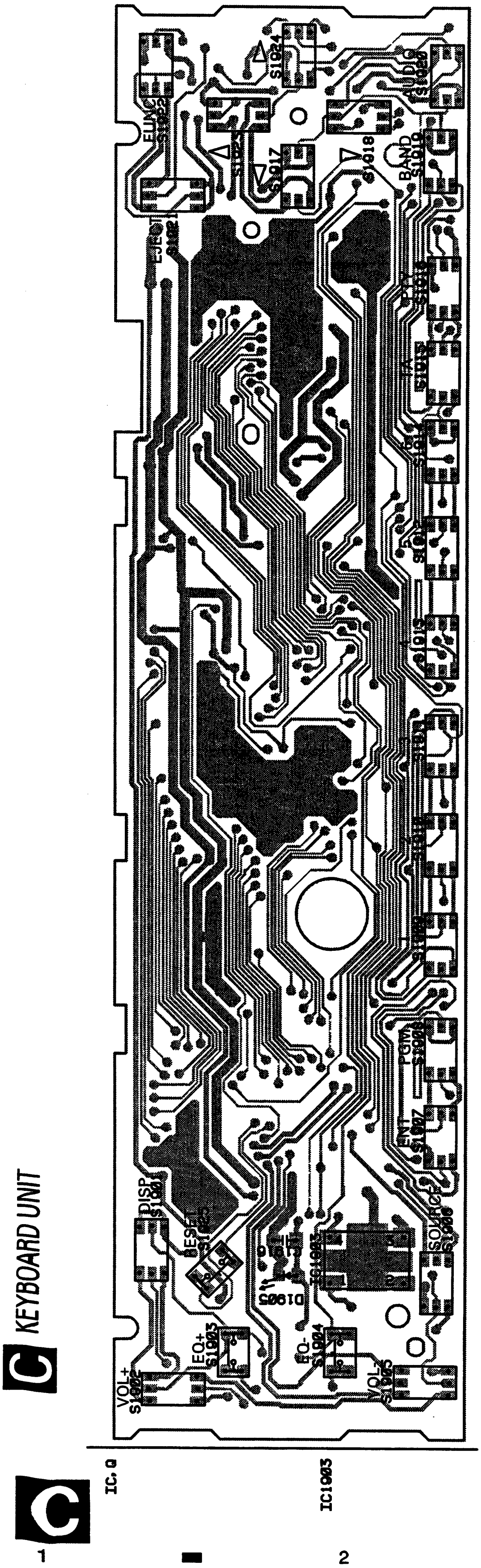
SIDE B



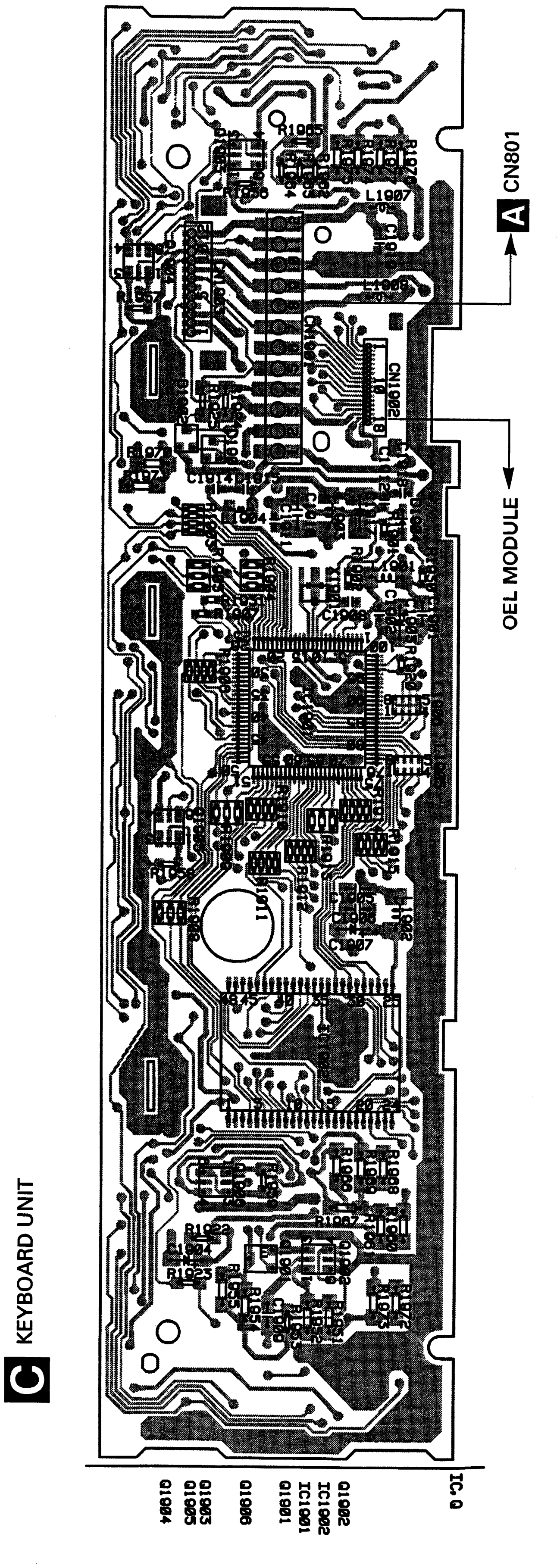
B FM/AM TUNER UNIT

4.3 KEYBOARD UNIT

SIDE A

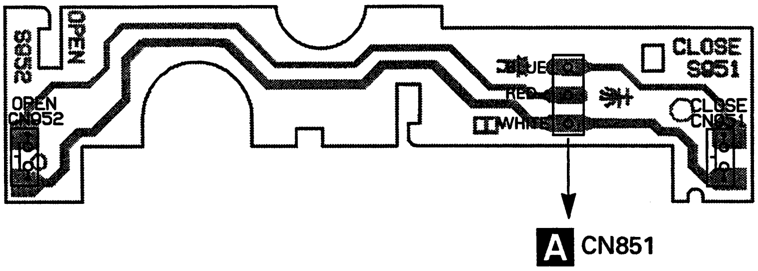

FUNC S1022
S1024
S1017
S1018
BAND S1010
AUDIO
EJECT
DISP S1001
RESET
EQ+ S1003
EQ- S1004
VOL+
VOL- S1005
SOURCE
ENT S1007
PGM S1008
IC1003
D1905
C KEYBOARD UNIT
IC,Q
IC1003

SIDE B


R1905
L1907
L1906
CN1902
C1907
A CN801
OEL MODULE
C KEYBOARD UNIT
Q1904
Q1903
Q1905
Q1906
Q1901
IC1901
IC1902
Q1902
IC,Q

4.4 SWITCH PCB

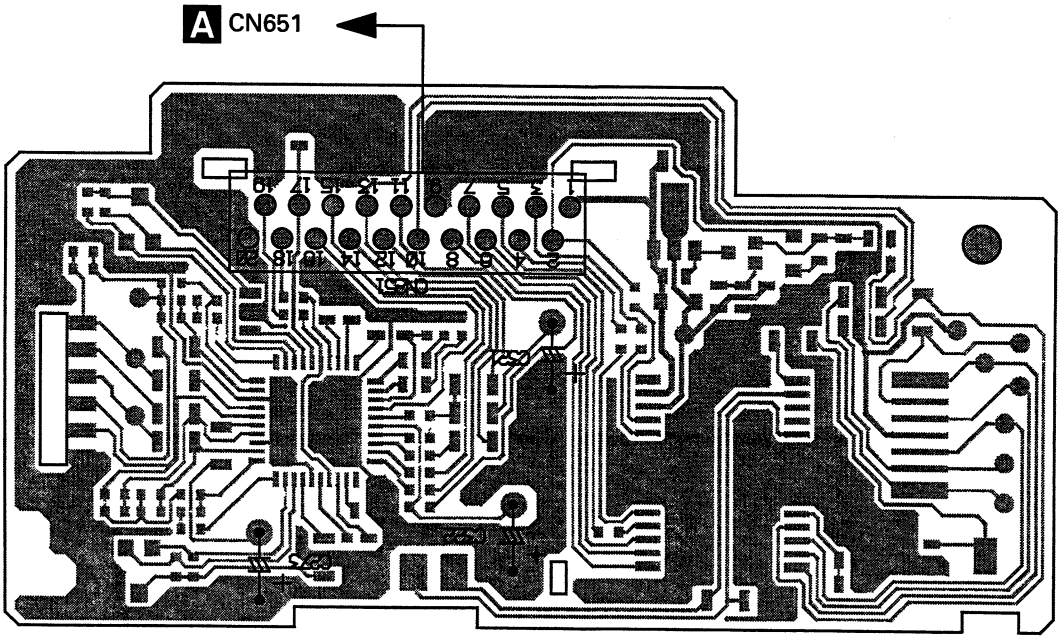
D SWITCH PCB


S952
OPEN
OPEN
CN952
CLOSE
S951
BLUE
RED
WHITE
CLOSE
CN851
A CN851

4.5 DECK UNIT

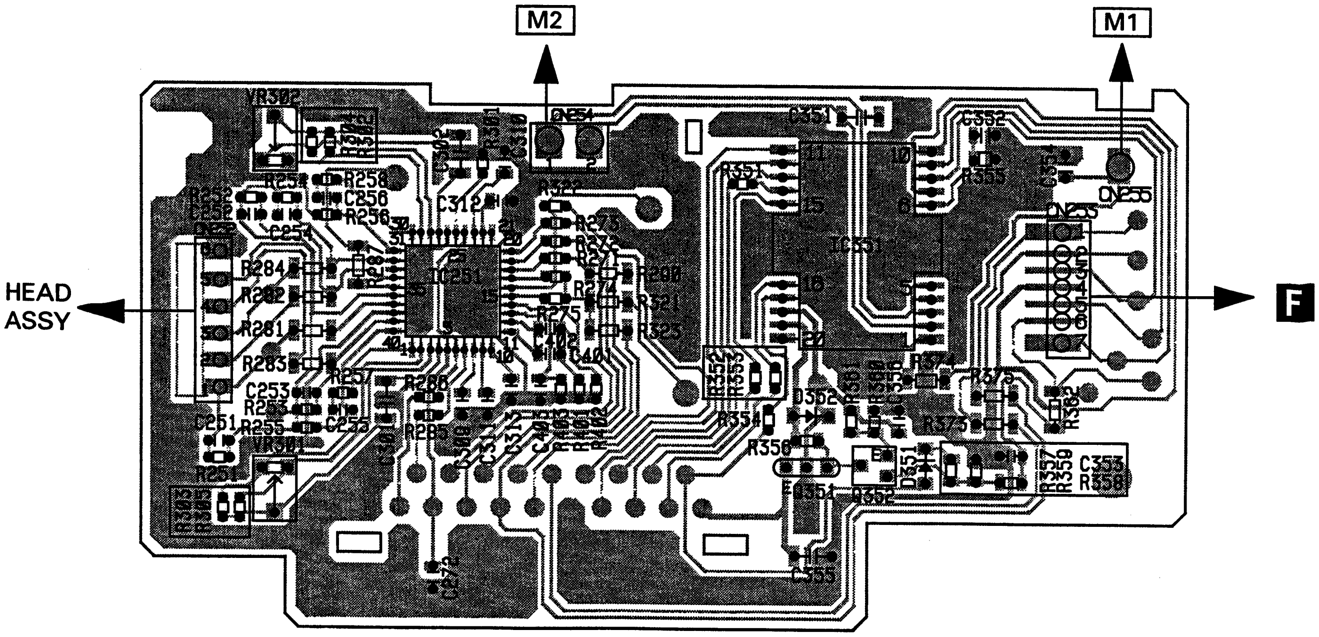
SIDE A

E DECK UNIT


A CN651
CN651
1 3 5 7 9 11 13 15 17 19
2 4 6 8 10 12 14 16 18 20
C251
C252
C253

SIDE B

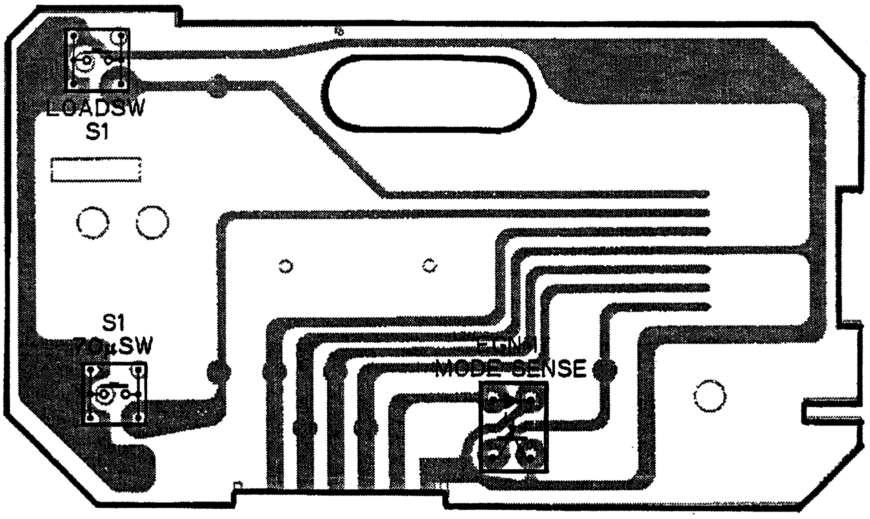
E DECK UNIT


M2
M1
HEAD ASSY
F
VR302
CN254
C351
C352
R351
R353
C354
CN255
CN253
IC351
R258
C856
R256
R252
C252
C254
C312
R322
R273
R272
R271
R298
R274
R321
R275
R323
C402
C401
IC251
R284
R282
R281
R283
C253
R253
R255
C255
C251
R257
R286
R285
VR301
R251
R352
R353
R354
R356
D352
R374
R375
R373
R362
R357
R359
C353
R358
D351
Q351
Q352
C555
C272

4.6 PCB UNIT

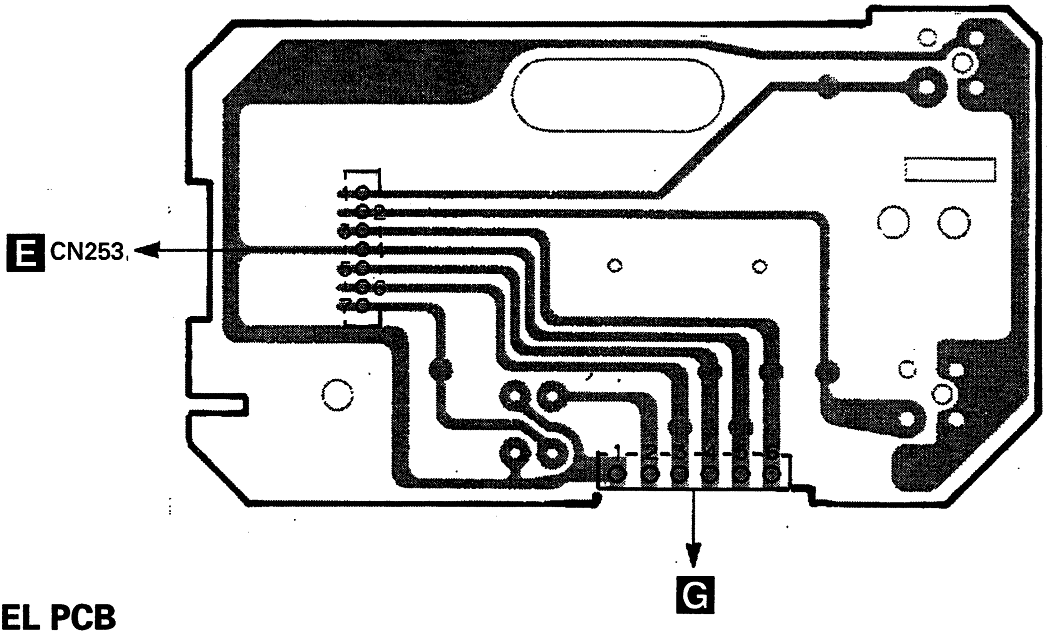
F PCB UNIT

SIDE A


LOADSW
S1
S1
70μSW
EGN1
MODE SENSE

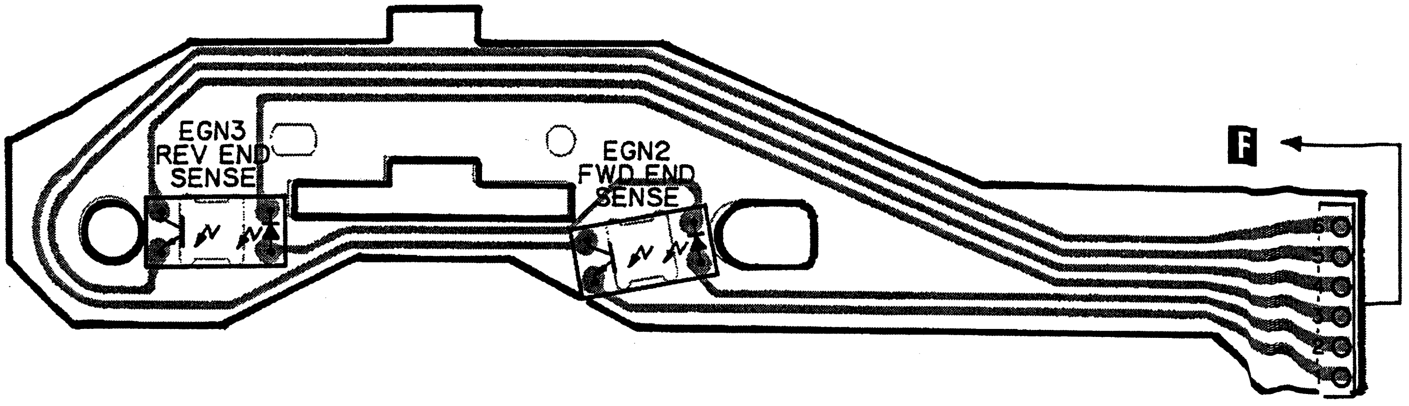
F PCB UNIT

SIDE B


E CN253
1
2
3
4
5
6
7
1
2
3
4
5
6
G

4.7 REEL PCB

G REEL PCB


EGN3
REV END
SENSE
EGN2
FWD END
SENSE
F
6
5
4
3
2
1

5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

  Chip Resistor

  RS1/○S○○○J,RS1/○○S○○○J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....

A Unit Number : CWM6305(KEH-P8800R/EW)
(KEH-P8800R-W/EW)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

=====Circuit Symbol and No.===Part Name			Part No.
IC	101	IC	CA0008AM
IC	203	IC	PML004AF
IC	231	IC	NJM4558MD
IC	271	IC	PA2028A
IC	301	IC	PAL005A
IC	501	IC	PM4009A
IC	601	IC	PD5495A
IC	851	IC	BA6288FS
IC	911	IC	S-81250SGUP
IC	961	IC	S-80735ANDZI
Q	101	Transistor	2SA1162
Q	102	Transistor	DTC124EK
Q	151	Transistor	2SD1757K
Q	152	Transistor	2SD1757K
Q	153	Transistor	IMH3A
Q	154	Transistor	DTA114EK
Q	155	Transistor	2SC2412K
Q	261	Transistor	2SA1162
Q	262	Transistor	DTC144EK
Q	301	Transistor	DTC124EK
Q	351	Transistor	2SC3326
Q	352	Transistor	2SC3326
Q	353	Transistor	2SC3326
Q	354	Transistor	2SC3326
Q	355	Transistor	2SC3326
Q	356	Transistor	2SC3326
Q	401	Transistor	2SC2412K
Q	402	Transistor	2SC2412K
Q	501	Transistor	DTA124EK
Q	641	Transistor	DTC114EK
Q	681	Transistor	2SA1162
Q	682	Transistor	DTC124EK
Q	683	Transistor	2SC2412K
Q	801	Transistor	2SD1760F5
Q	802	Transistor	IMD2A
Q	803	Transistor	2SD2396
Q	805	Transistor	2SC2412K
Q	806	Transistor	2SB1238
Q	807	Transistor	DTC143EK
Q	808	Transistor	IMD2A
Q	851	Transistor	2SD1760F5
Q	852	Transistor	DTA114EK
Q	853	Transistor	DTC124EK
Q	911	Transistor	2SD1760F5
Q	913	Transistor	IMD2A
Q	921	Transistor	2SD2396
Q	922	Transistor	DTC124EK
Q	923	Transistor	2SB1238
Q	931	Transistor	IMX1
Q	932	Transistor	2SC2412K
Q	951	Transistor	2SA1162
Q	962	Transistor	2SC2412K
Q	981	Transistor	2SC2412K
Q	983	Transistor	2SC2412K
D	231	Diode	MA153
D	232	Diode	MA153
D	233	Diode	MA153
D	234	Diode	MA153
D	651	Diode	1SS133
D	683	LED	BR4361F
D	801	Diode	MA153
D	802	Diode	MA153
D	803	Diode	MA153
D	804	Diode	MA153
D	805	Diode	HZS6L(B1)
D	806	Diode	HZS9L(C3)
D	807	LED	CL170PGCD
D	808	LED	CL170PGCD
D	809	LED	CL170PGCD
D	810	Diode	MA3062(M)
D	851	Diode	HZS7L(C3)
D	852	Diode	1SS133
D	853	Diode	1SS133
D	901	Diode	ERA15-02VH
D	902	Diode	ERA15-02VH
D	903	Diode	ERA15-02VH
D	911	Diode	ERA15-02VH
D	912	Diode	HZS6L(B1)
D	914	Diode	HZS16(2)
D	921	Diode	HZS9L(B3)
D	931	Diode	HZS7L(A1)
D	932	Diode	HZS7L(C2)
D	951	Diode	MA152WK
D	961	Diode	MA152K
D	981	Diode	MA152WK
D	982	Diode	HZS9L(A2)
ZNR	451	Surge Protector	DSPS-201M-S00B
L	101	Inductor	LAU3R3K
L	167	Inductor	LCTB2R2K1608
L	168	Inductor	LCTB2R2K1608
L	271	Ferri-Inductor	LAU101K
L	401	Ferri-Inductor	LAU2R2K
L	402	Inductor	LCTB4R7K2125
L	403	Ferri-Inductor	LAU1R0M
L	501	Inductor	CTF1420
L	502	Ferri-Inductor	LAU101K
L	601	Inductor	LAU100K
L	801	Inductor	LAU100K
L	802	Inductor	CTF1489
L	951	Ferri-Inductor	LAU2R2K
X	501	Crystal Resonator 3.648MHz	CSS1447
X	601	Radiator 10.00MHz	CSS1475
BZ	641	Buzzer	CPV1012
		FM/AM Tuner Unit	CWE1500

RESISTORS

Circuit Symbol and No.		Part Name	Part No.
R	101		RS1/10S101J
R	102		RS1/10S620J
R	103		RS1/10S101J
R	104		RS1/10S222J
R	105		RS1/10S103J
R	106		RS1/10S562J
R	107		RS1/10S332J
R	109		RS1/10S181J
R	110		RS1/10S181J
R	111		RS1/10S223J
R	112		RS1/10S223J
R	113		RS1/10S102J
R	114		RS1/10S102J
R	153		RS1/10S224J
R	154		RS1/10S224J
R	155		RS1/10S222J
R	156		RS1/10S222J
R	157		RS1/10S223J
R	158		RS1/10S223J
R	159		RS1/10S224J
R	160		RS1/10S473J
R	161		RS1/10S162J
R	162		RS1/10S162J
R	163		RS1/10S272J
R	164		RS1/10S272J
R	231		RS1/10S474J
R	232		RS1/10S474J
R	233		RS1/10S273J
R	234		RS1/10S273J
R	235		RS1/10S104J
R	236		RS1/10S104J
R	241		RS1/16S0R0J
R	242		RS1/16S0R0J
R	283		RS1/10S203J
R	301		RS1/10S103J
R	302		RS1/10S103J
R	304		RS1/10S331J
R	351		RS1/16S820J
R	352		RS1/16S820J
R	353		RS1/16S820J
R	354		RS1/16S820J
R	355		RS1/16S820J
R	356		RS1/16S820J
R	357		RS1/16S223J
R	358		RS1/16S223J
R	359		RS1/16S223J
R	360		RS1/16S223J
R	361		RS1/16S223J
R	362		RS1/16S223J
R	363		RS1/16S103J
R	364		RS1/16S103J
R	365		RS1/16S103J
R	366		RS1/16S103J
R	367		RS1/16S103J
R	368		RS1/16S103J
R	369		RS1/16S471J
R	370		RS1/16S471J
R	371		RS1/16S471J
R	372		RS1/16S471J
R	373		RS1/16S471J
R	374		RS1/16S471J
R	401		RS1/10S473J
R	402		RS1/10S473J
R	403		RS1/10S681J
R	404		RS1/10S681J
R	405		RS1/10S681J
R	406		RS1/10S102J
R	407		RS1/10S473J
R	409		RS1/10S681J
R	410		RS1/10S103J
R	411		RS1/10S681J
R	412		RS1/10S681J
R	413		RS1/10S681J
R	414		RS1/10S473J
R	415		RS1/10S472J
R	416		RS1/10S473J
R	417		RS1/10S473J
R	418		RS1/10S473J
R	419		RS1/10S222J
R	420		RS1/10S222J
R	421		RS1/10S681J
R	422		RS1/10S681J
R	424		RS1/10S393J
R	426		RS1/16S153J
R	427		RS1/16S474J
R	428		RS1/16S681J
R	501		RS1/16S102J
R	502		RS1/16S102J
R	503		RS1/16S102J
R	507		RS1/16S102J
R	508		RS1/10S0R0J
R	511		RS1/16S102J
R	512		RS1/10S0R0J
R	513		RS1/10S225J
R	518		RS1/16S681J
R	601		RS1/10S473J
R	602		RS1/10S472J
R	609		RS1/10S473J
R	610		RS1/10S473J
R	611		RS1/10S473J
R	612		RA3C102J
R	620		RS1/10S473J
R	623		RS1/10S473J
R	627		RS1/10S473J
R	629		RS1/10S473J
R	630		RS1/10S473J
R	634		RS1/10S102J
R	641		RS1/10S202J
R	642		RS1/10S102J
R	651		RA4C681J
R	652		RA4C102J
R	653		RA4C102J
R	654		RS1/10S473J
R	655		RS1/10S102J
R	656		RS1/10S102J
R	657		RS1/10S103J
R	658		RS1/10S473J
R	663		RS1/10S473J
R	664		RS1/10S473J
R	665		RS1/10S473J
R	681		RS1/8S102J
R	686		RS1/10S103J
R	687		RS1/10S223J
R	688		RS1/10S223J
R	689		RS1/10S223J
R	690		RS1/10S272J
R	695		RS1/10S473J
R	698		RS1/8S471J
R	699		RS1/10S102J
R	700		RS1/10S103J

=====Circuit Symbol	and No.	===Part Name	Part No.
R	801		RS1/8S222J
R	802		RS1/8S471J
R	803		RS1/8S471J
R	804		RS1/8S103J
R	805		RS1/8S472J
R	806		RS2PMF220J
R	807		RS1/4S471J
R	809		RS1/10S103J
R	810		RS1/10S222J
R	811		RS1/4S152J
R	812		RS1/10S152J
R	813		RS1/10S221J
R	814		RS1/10S152J
R	815		RS1/10S1R0J
R	819		RS1/10S103J
R	821		RS1/8S222J
R	822		RS1/8S222J
R	851		RS1/4S271J
R	852		RS1/10S102J
R	853		RS1/10S102J
R	862		RS1/10S102J
R	864		RS1/10S102J
R	865		RS1/10S102J
R	912		RS1/10S152J
R	913		RS1/10S512J
R	914		RS1/8S151J
R	922		RS1/8S221J
R	923		RS1/10S122J
R	924		RS1/8S272J
R	926		RS1/10S223J
R	931		RS1/10S472J
R	932		RS1/10S473J
R	933		RS1/10S223J
R	934		RS1/10S473J
R	935		RS1/10S473J
R	936		RS1/10S103J
R	937		RS1/10S473J
R	951		RS1/8S153J
R	952		RS1/10S472J
R	953		RS1/10S472J
R	954		RS1/10S102J
R	961		RS1/10S103J
R	962		RS1/10S102J
R	963		RS1/10S473J
R	964		RS1/10S822J
R	981		RS1/10S223J
R	982		RS1/10S473J
R	983		RS1/10S103J
R	984		RS1/10S223J
R	985		RS1/10S102J
R	986		RS1/10S103J
R	987		RS1/10S224J
R	988		RS1/10S333J
R	989		RS1/10S473J

CAPACITORS

C	101		CKSQYB104K16
C	102		CKSQYB104K16
C	151		CEJA1R0M50
C	152		CEJA1R0M50
C	153		CKSQYB223K50
C	155		CCSRCH101J50
C	161		CKSQYB123K25
C	162		CKSQYB123K25
C	171		CEJA470M16
C	172		CKSQYB104K16

=====Circuit Symbol	and No.	===Part Name	Part No.
C	173		CEJA100M16
C	203		CEJA1R0M50
C	204		CEJA1R0M50
C	205		CEJAR22M50
C	206		CEJAR22M50
C	207		CEJA1R0M50
C	208		CEJA1R0M50
C	209		CEJA1R0M50
C	210		CEJA1R0M50
C	211		CEJANP4R7M16
C	212		CEJANP4R7M16
C	213		CEJANP4R7M16
C	214		CEJANP4R7M16
C	215		CKSQYB473K25
C	216		CKSQYB473K25
C	217		CKSQYB473K25
C	218		CKSQYB473K25
C	225		CKSQYB333K50
C	226		CKSQYB123K25
C	227		CKSQYB473K25
C	228		CKSQYB153K50
C	229		CKSQYB153K50
C	231		CCSQCH101J50
C	232		CCSQCH101J50
C	233		CKSYB474K16
C	234		CKSYB474K16
C	235		CKSQYB104K16
C	236		CKSQYB104K16
C	237		CKSQYB104K16
C	238		CKSQYB104K16
C	239		CKSQYB103K50
C	271		CEJANP1R0M50
C	272		CEJANP1R0M50
C	273		CEJANP1R0M50
C	274		CEJANP1R0M50
C	275		CEJANP1R0M50
C	276		CEJANP1R0M50
C	277		CEJA4R7M35
C	278		CEJA101M16
C	279		CEJA100M16
C	280		CEJA100M16
C	281		CKSQYB105K16
C	284		CEJA330M25
C	285		CEJA330M25
C	286		CASAQ3R3M16
C	288		CKSYB684K25
C	301		CKSQYB224K16
C	302		CKSQYB224K16
C	303		CKSQYB224K16
C	304		CKSQYB224K16
C	306		CEHAR330M10
C	307	4700μF/16V	CCH1178
C	309		CKSQYB104K16
C	310		CEHAR100M16
C	311		CKSYB105K16
C	351		CEJA100M35
C	352		CEJA100M35
C	353		CEJA100M35
C	354		CEJA100M35
C	355		CEJA100M35
C	356		CEJA100M35
C	357		CKSRYB222K50
C	358		CKSRYB222K50
C	359		CKSRYB222K50
C	360		CKSRYB222K50

=====Circuit Symbol and No.===Part Name			Part No.
C	361		CKSRYB222K50
C	362		CKSRYB222K50
C	401		CKSQYB182K50
C	403		CKSQYB473K25
C	404		CEJA470M10
C	405		CKSQYB103K50
C	406		CEJA220M10
C	407		CKSQYB103K50
C	408		CKSQYB223K50
C	409		CKSQYB223K50
C	411		CKSQYB472K50
C	412		CKSQYB472K50
C	503		CCSQCH270J50
C	504		CCSQCH270J50
C	505		CKSQYB104K16
C	506		CKSQYB471K50
C	507		CKSQYB471K50
C	508		CKSQYB104K16
C	509		CEJA220M6R3
C	510		CCSQCH101J50
C	511		CKSQYB103K50
C	512		CCSRCH101J50
C	513		CCSRCH101J50
C	514		CKSRYB102K50
C	515		CCSRCH101J50
C	601		CEJA4R7M35
C	602		CKSQYB103K50
C	604		CCSRCH150J50
C	605		CCSRCH220J50
C	651		CEJA100M16
C	652		CEJA220M10
C	683		CKSQYB103K50
C	686		CKSQYB473K25
C	801		CKSQYB104K16
C	802		CCSQCH101J50
C	803		CEJA470M10
C	804		CKSQYB103K50
C	806		CKSQYB103K50
C	808		CEJA101M10
C	809		CKSQYB104K16
C	810		CKSQYB104K16
C	811		CKSQYB104K16
C	812		CKSQYB105K16
C	851		CKSQYB103K50
C	852		CKSYB104K25
C	853		CEJA220M16
C	855		CKSQYB222K50
C	856		CCSQCH101J50
C	857		CCSQCH101J50
C	901		CKSQYB103K50
C	911		CEAS102M16
C	912		CKSQYB472K50
C	913		CKSQYB103K50
C	914		CEJA470M10
C	915		CEJA470M10
C	921	330μF/10V	CCH1181
C	922		CKSQYB103K50
C	923		CEJA101M16
C	931		CEJA100M16
C	933		CKSQYB472K50
C	961		CKSQYB102K50
C	962		CKSQYB104K16
C	963		CEJA2R2M50
C	964		CEJA4R7M35

=====Circuit Symbol and No.===Part Name Part No.

A Unit Number : CWM6307(KEH-P8850/ES)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	101	IC	CA0008AM
IC	203	IC	PML004AF
IC	231	IC	NJM4558MD
IC	271	IC	PA2028A
IC	301	IC	PAL005A
IC	601	IC	PD5496A
IC	681	IC	TPD1018F
IC	851	IC	BA6288FS
IC	911	IC	S-81250SGUP
IC	961	IC	S-80735ANDZI
Q	101	Transistor	2SA1162
Q	102	Transistor	DTC124EK
Q	261	Transistor	2SA1162
Q	262	Transistor	DTC144EK
Q	301	Transistor	DTC124EK
Q	351	Transistor	2SC3326
Q	352	Transistor	2SC3326
Q	353	Transistor	2SC3326
Q	354	Transistor	2SC3326
Q	355	Transistor	2SC3326
Q	356	Transistor	2SC3326
Q	401	Transistor	2SC2412K
Q	641	Transistor	DTC114EK
Q	681	Transistor	2SA1162
Q	682	Transistor	DTC124EK
Q	683	Transistor	2SC2412K
Q	684	Transistor	2SC2412K
Q	685	Transistor	2SC2412K
Q	801	Transistor	2SD1760F5
Q	802	Transistor	IMD2A
Q	803	Transistor	2SD2396
Q	805	Transistor	2SC2412K
Q	806	Transistor	2SB1238
Q	807	Transistor	DTC143EK
Q	808	Transistor	IMD2A
Q	851	Transistor	2SD1760F5
Q	852	Transistor	DTA114EK
Q	853	Transistor	DTC124EK
Q	911	Transistor	2SD1760F5
Q	913	Transistor	IMD2A
Q	921	Transistor	2SD2396
Q	922	Transistor	DTC124EK
Q	923	Transistor	2SB1238
Q	931	Transistor	IMX1
Q	932	Transistor	2SC2412K
Q	951	Transistor	2SA1162
Q	962	Transistor	2SC2412K
Q	981	Transistor	2SC2412K
Q	983	Transistor	2SC2412K
D	231	Diode	MA153
D	232	Diode	MA153
D	233	Diode	MA153
D	234	Diode	MA153
D	651	Diode	1SS133
D	681	Diode	ERA15-02VH
D	682	Diode	ERA15-02VH
D	683	LED	BR4361F
D	801	Diode	MA153
D	802	Diode	MA153
D	803	Diode	MA153
D	804	Diode	MA153
D	805	Diode	HZS6L(B1)
D	806	Diode	HZS9L(C3)
D	807	LED	CL170PGCD
D	808	LED	CL170PGCD

=====Circuit Symbol and No.===Part Name			Part No.
D	809	LED	CL170PGCD
D	810	Diode	MA3062(M)
D	851	Diode	HZS7L(C3)
D	852	Diode	1SS133
D	853	Diode	1SS133
D	901	Diode	ERA15-02VH
D	902	Diode	ERA15-02VH
D	903	Diode	ERA15-02VH
D	911	Diode	ERA15-02VH
D	912	Diode	HZS6L(B1)
D	914	Diode	HZS16(2)
D	921	Diode	HZS9L(B3)
D	931	Diode	HZS7L(A1)
D	932	Diode	HZS7L(C2)
D	951	Diode	MA152WK
D	961	Diode	MA152K
D	981	Diode	MA152WK
D	982	Diode	HZS9L(A2)
ZNR	451	Surge Protector	DSPS-201M-S00B
L	101	Inductor	LAU3R3K
L	271	Ferri-Inductor	LAU101K
L	401	Ferri-Inductor	LAU2R2K
L	402	Inductor	LCTB4R7K2125
L	403	Ferri-Inductor	LAU1R0M
L	601	Inductor	LAU100K
L	801	Inductor	LAU100K
L	802	Inductor	CTF1489
L	951	Ferri-Inductor	LAU2R2K
X	601	Radiator 10.00MHz	CSS1475
BZ	641	Buzzer	CPV1012
		FM/AM Tuner Unit	CWE1501

RESISTORS

		Part No.
R	101	RS1/10S101J
R	102	RS1/10S620J
R	103	RS1/10S101J
R	104	RS1/10S222J
R	105	RS1/10S103J
R	106	RS1/10S562J
R	107	RS1/10S332J
R	109	RS1/10S181J
R	110	RS1/10S181J
R	111	RS1/10S223J
R	112	RS1/10S223J
R	113	RS1/10S102J
R	114	RS1/10S102J
R	151	RS1/10S0R0J
R	152	RS1/10S0R0J
R	161	RS1/10S272J
R	162	RS1/10S272J
R	163	RS1/10S162J
R	164	RS1/10S162J
R	167	RS1/16S0R0J
R	168	RS1/16S0R0J
R	231	RS1/10S474J
R	232	RS1/10S474J
R	233	RS1/10S273J
R	234	RS1/10S273J
R	235	RS1/10S104J
R	236	RS1/10S104J
R	241	RS1/16S0R0J
R	242	RS1/16S0R0J
R	283	RS1/10S203J
R	301	RS1/10S103J
R	302	RS1/10S103J
R	304	RS1/10S331J
R	351	RS1/16S820J
R	352	RS1/16S820J

=====Circuit Symbol and No.===Part Name			Part No.
R	353		RS1/16S820J
R	354		RS1/16S820J
R	355		RS1/16S820J
R	356		RS1/16S820J
R	357		RS1/16S223J
R	358		RS1/16S223J
R	359		RS1/16S223J
R	360		RS1/16S223J
R	361		RS1/16S223J
R	362		RS1/16S223J
R	363		RS1/16S103J
R	364		RS1/16S103J
R	365		RS1/16S103J
R	366		RS1/16S103J
R	367		RS1/16S103J
R	368		RS1/16S103J
R	369		RS1/16S471J
R	370		RS1/16S471J
R	371		RS1/16S471J
R	372		RS1/16S471J
R	373		RS1/16S471J
R	374		RS1/16S471J
R	401		RS1/10S473J
R	402		RS1/10S473J
R	403		RS1/10S681J
R	404		RS1/10S681J
R	409		RS1/10S681J
R	410		RS1/10S103J
R	411		RS1/10S681J
R	412		RS1/10S681J
R	413		RS1/10S681J
R	414		RS1/10S473J
R	415		RS1/10S472J
R	416		RS1/10S473J
R	417		RS1/10S473J
R	418		RS1/10S473J
R	419		RS1/10S222J
R	420		RS1/10S222J
R	424		RS1/10S393J
R	601		RS1/10S473J
R	602		RS1/10S472J
R	609		RS1/10S473J
R	610		RS1/10S473J
R	611		RS1/10S473J
R	612		RA3C102J
R	620		RS1/10S473J
R	623		RS1/10S473J
R	627		RS1/10S473J
R	629		RS1/10S473J
R	630		RS1/10S473J
R	631		RS1/10S102J
R	632		RS1/10S473J
R	634		RS1/10S102J
R	641		RS1/10S202J
R	642		RS1/10S102J
R	651		RA4C681J
R	652		RA4C102J
R	653		RA4C102J
R	654		RS1/10S473J
R	655		RS1/10S102J
R	656		RS1/10S102J
R	657		RS1/10S103J
R	658		RS1/10S473J
R	663		RS1/10S473J
R	664		RS1/10S473J
R	665		RS1/10S473J
R	681		RS1/8S102J
R	682		RS1/8S102J
R	683		RS1/8S102J
R	684		RS1/10S103J

=====Circuit Symbol and No.		===Part Name	Part No.
R	685		RS1/10S103J
R	686		RS1/10S103J
R	687		RS1/10S223J
R	688		RS1/10S223J
R	689		RS1/10S223J
R	690		RS1/10S272J
R	691		RS1/10S223J
R	692		RS1/10S272J
R	693		RS1/10S223J
R	694		RS1/10S272J
R	695		RS1/10S473J
R	696		RS1/10S473J
R	697		RS1/10S473J
R	698		RS1/8S471J
R	699		RS1/10S102J
R	700		RS1/10S103J
R	801		RS1/8S222J
R	802		RS1/8S471J
R	803		RS1/8S471J
R	804		RS1/8S103J
R	805		RS1/8S472J
R	806		RS2PMF220J
R	807		RS1/4S471J
R	809		RS1/10S103J
R	810		RS1/10S222J
R	811		RS1/4S152J
R	812		RS1/10S152J
R	813		RS1/10S221J
R	814		RS1/10S152J
R	815		RS1/10S1R0J
R	819		RS1/10S103J
R	821		RS1/8S222J
R	822		RS1/8S222J
R	851		RS1/4S271J
R	852		RS1/10S102J
R	853		RS1/10S102J
R	862		RS1/10S102J
R	864		RS1/10S102J
R	865		RS1/10S102J
R	912		RS1/10S152J
R	913		RS1/10S512J
R	914		RS1/8S151J
R	922		RS1/8S221J
R	923		RS1/10S122J
R	924		RS1/8S272J
R	926		RS1/10S223J
R	931		RS1/10S472J
R	932		RS1/10S473J
R	933		RS1/10S223J
R	934		RS1/10S473J
R	935		RS1/10S473J
R	936		RS1/10S103J
R	937		RS1/10S473J
R	951		RS1/8S153J
R	952		RS1/10S472J
R	953		RS1/10S472J
R	954		RS1/10S102J
R	961		RS1/10S103J
R	962		RS1/10S102J
R	963		RS1/10S473J
R	964		RS1/10S822J
R	981		RS1/10S223J
R	982		RS1/10S473J
R	983		RS1/10S103J
R	984		RS1/10S223J

=====Circuit Symbol and No.		===Part Name	Part No.
R	985		RS1/10S102J
R	986		RS1/10S103J
R	987		RS1/10S224J
R	988		RS1/10S333J
R	989		RS1/10S473J

CAPACITORS

C	101		CKSQYB104K16
C	102		CKSQYB104K16
C	155		CCSRCH101J50
C	161		CKSQYB183K50
C	162		CKSQYB183K50
C	171		CEJA470M16
C	172		CKSQYB104K16
C	173		CEJA100M16
C	203		CEJA1R0M50
C	204		CEJA1R0M50
C	205		CEJAR22M50
C	206		CEJAR22M50
C	207		CEJA1R0M50
C	208		CEJA1R0M50
C	209		CEJA1R0M50
C	210		CEJA1R0M50
C	211		CEJANP4R7M16
C	212		CEJANP4R7M16
C	213		CEJANP4R7M16
C	214		CEJANP4R7M16
C	215		CKSQYB473K25
C	216		CKSQYB473K25
C	217		CKSQYB473K25
C	218		CKSQYB473K25
C	225		CKSQYB333K50
C	226		CKSQYB123K25
C	227		CKSQYB473K25
C	228		CKSQYB153K50
C	229		CKSQYB153K50
C	231		CCSQCH101J50
C	232		CCSQCH101J50
C	233		CKSYB474K16
C	234		CKSYB474K16
C	235		CKSQYB104K16
C	236		CKSQYB104K16
C	237		CKSQYB104K16
C	238		CKSQYB104K16
C	239		CKSQYB103K50
C	271		CEJANP1R0M50
C	272		CEJANP1R0M50
C	273		CEJANP1R0M50
C	274		CEJANP1R0M50
C	275		CEJANP1R0M50
C	276		CEJANP1R0M50
C	277		CEJA4R7M35
C	278		CEJA101M16
C	279		CEJA100M16
C	280		CEJA100M16
C	281		CKSQYB105K16
C	284		CEJA330M25
C	285		CEJA330M25
C	286		CASA03R3M16
C	288		CKSYB684K25
C	301		CKSQYB224K16
C	302		CKSQYB224K16

=====Circuit Symbol and No.===Part Name			Part No.
C	303		CKSQYB224K16
C	304		CKSQYB224K16
C	306		CEHAR330M10
C	307	4700μF/16V	CCH1178
C	309		CKSQYB104K16
C	310		CEHAR100M16
C	311		CKSYB105K16
C	351		CEJA100M35
C	352		CEJA100M35
C	353		CEJA100M35
C	354		CEJA100M35
C	355		CEJA100M35
C	356		CEJA100M35
C	357		CKSRYB222K50
C	358		CKSRYB222K50
C	359		CKSRYB222K50
C	360		CKSRYB222K50
C	361		CKSRYB222K50
C	362		CKSRYB222K50
C	403		CKSQYB473K25
C	404		CEJA470M10
C	405		CKSQYB103K50
C	406		CEJA220M10
C	407		CKSQYB103K50
C	408		CKSQYB223K50
C	409		CKSQYB223K50
C	411		CKSQYB472K50
C	413		CCSRCH101J50
C	511		CKSQYB103K50
C	601		CEJA4R7M35
C	602		CKSQYB103K50
C	604		CCSRCH150J50
C	605		CCSRCH220J50
C	651		CEJA100M16
C	652		CEJA220M10
C	653		CCSRCH101J50
C	681		CKSYB104K25
C	682		CKSQYB473K25
C	683		CKSQYB103K50
C	684		CKSQYB103K50
C	685		CKSQYB103K50
C	686		CKSQYB473K25
C	801		CKSQYB104K16
C	802		CCSQCH101J50
C	803		CEJA470M10
C	804		CKSQYB103K50
C	806		CKSQYB103K50
C	808		CEJA101M10
C	809		CKSQYB104K16
C	810		CKSQYB104K16
C	811		CKSQYB104K16
C	812		CKSQYB105K16
C	851		CKSQYB103K50
C	852		CKSYB104K25
C	853		CEJA220M16
C	855		CKSQYB222K50
C	856		CCSQCH101J50
C	857		CCSQCH101J50
C	901		CKSQYB103K50
C	911		CEAS102M16
C	912		CKSQYB472K50
C	913		CKSQYB103K50
C	914		CEJA470M10
C	915		CEJA470M10
C	921	330μF/10V	CCH1181

=====Circuit Symbol and No.===Part Name			Part No.
C	922		CKSQYB103K50
C	923		CEJA101M16
C	931		CEJA100M16
C	933		CKSQYB472K50
C	961		CKSQYB102K50
C	962		CKSQYB104K16
C	963		CEJA2R2M50
C	964		CEJA4R7M35

B Unit Number : CWE1500(KEH-P8800R/EW)
(KEH-P8800R-W/EW)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC	1	IC	PML002A
IC	2	IC	PM4008A
IC	3	IC	BR9010FV
Q	1	Transistor	2SC4081
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	51	Transistor	2SC4081
Q	201	FET	2SK932
Q	202	Transistor	DTC124EU
Q	204	Transistor	2SC4081
D	1	Diode	KV1410(23)
D	2	Diode	1SV248
D	4	Diode	KV1410(23)
D	6	Diode	KV1410(23)
D	101	Diode	MA110
D	201	Diode	MA143
D	202	Diode	MA147
D	903	Diode	KV1410(23)
D	904	Diode	SVC253
L	1	Coil	CTC1155
L	2	Coil	CTC1155
L	3	Inductor	LCTB100K2125
L	4	Coil	CTC1155
L	201	Inductor	LCTB330K1608
L	202	Inductor	CTF1287
L	203	Inductor	LCTA121J3225
L	901	Coil	CTC1154
L	902	Inductor	LCTA3R3J3225
L	904	Inductor	LCTBR47K1608
L	905	Inductor	LCTBR47K1608
T	51	Coil	CTE1132
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442
CF	202	Ceramic Filter	CTF1476
X	901	Crystal Resonator 10.250MHz	CSS1432

RESISTORS

R	1		RS1/16S153J
R	2		RS1/16S103J
R	6		RS1/16S103J
R	7		RS1/16S273J
R	8		RS1/16S473J
R	9		RS1/16S223J
R	10		RS1/16S473J
R	11		RS1/16S221J
R	12		RS1/16S103J
R	13		RS1/16S104J
R	16		RS1/16S223J
R	17		RS1/16S221J
R	18		RS1/16S221J
R	19		RS1/16S473J
R	20		RS1/16S470J

=====Circuit Symbol and No.===Part Name			Part No.
R	51		RS1/16S470J
R	52		RS1/16S103J
R	53		RS1/16S103J
R	54		RS1/16S331J
R	55		RS1/16S331J
R	56		RS1/16S560J
R	57		RS1/16S560J
R	58		RS1/16S102J
R	59		RS1/16S225J
R	60		RS1/16S133J
R	61		RS1/16S433J
R	62		RS1/16S562J
R	101		RS1/16S333J
R	102		RS1/16S103J
R	103		RS1/16S333J
R	104		RS1/16S562J
R	106		RS1/16S0R0J
R	108		RS1/16S0R0J
R	110		RS1/16S154J
R	111		RS1/16S273J
R	112		RS1/16S223J
R	113		RS1/16S222J
R	114		RS1/16S333J
R	115		RS1/16S334J
R	116		RS1/16S473J
R	117		RS1/16S333J
R	118		RS1/16S223J
R	122		RS1/16S0R0J
R	202		RS1/16S472J
R	203		RS1/16S225J
R	204		RS1/16S102J
R	205		RS1/16S220J
R	206		RS1/16S471J
R	208		RS1/16S104J
R	209		RS1/16S104J
R	210		RS1/16S563J
R	213		RS1/16S223J
R	902		RS1/16S103J
R	904		RS1/16S473J
R	907		RS1/16S103J
R	908		RS1/16S681J
R	909		RS1/16S473J
R	914		RS1/16S562J

CAPACITORS

C	1		CCSQCH5R0C50
C	2		CCSRCH5R0C50
C	4		CCSRCJ3R0C50
C	6		CKSQYB105K10
C	8		CKSRYB222K50
C	10		CCSRCH220J50
C	11		CCSRCH150J50
C	12		CCSRCH8R0D50
C	14		CCSRCJ3R0C50
C	15		CKSRYB103K50
C	16		CKSRYB222K50
C	17		CKSRYB222K50
C	18		CCSRCJ3R0C50
C	19		CKSRYB103K50
C	20		CKSRYB103K50
C	21		CKSRYB103K50
C	24		CKSQYB334K16
C	31		CKSRYB222K50
C	32		CCSRCH470J50
C	35		CKSRYB103K50

=====Circuit Symbol and No.===Part Name			Part No.
C	51		CKSRYB103K50
C	52		CKSRYB473K16
C	53		CCSRCK2R0C50
C	54		CKSRYB103K50
C	55		CKSRYB104K16
C	56		CKSRYB104K16
C	58		CKSQYB224K16
C	59		CKSRYB223K25
C	60		CKSRYB104K16
C	101		CEALNP100M10
C	102		CCSRCH151J50
C	103		CKSRYB473K16
C	105		CKSRYB682K25
C	106		CEAL2R2M50
C	107		CKSRYB103K50
C	108		CKSQYB474K16
C	109		CKSQYB474K16
C	110		CKSRYB104K16
C	111		CKSRYB104K16
C	112		CKSRYB104K16
C	113		CKSRYB123K25
C	114		CEAL220M6R3
C	115		CKSRYB473K16
C	116		CEAL2R2M50
C	117		CKSRYB102K50
C	120		CKSRYB153K25
C	121		CKSRYB332K50
C	122		CKSRYB682K25
C	123		CKSRYB681K50
C	125		CKSRYB103K50
C	126		CKSRYB103K50
C	127		CEAL2R2M50
C	128		CKSRYB103K50
C	201		CCSRCH471J50
C	202		CCSRCH100D50
C	203		CKSRYB104K16
C	204		CKSRYB332K50
C	205		CKSRYB103K50
C	206		CKSRYB104K16
C	207		CKSRYB473K16
C	208		CCSRCH560J50
C	209		CEAL470M6R3
C	210		CKSRYB103K50
C	211		CKSRYB103K50
C	212		CCSRCH101J50
C	215		CKSRYB223K25
C	216		CKSQYB334K16
C	217		CKSRYB103K50
C	219		CKSQYB105K10
C	220		CKSRYB104K16
C	221		CKSRYB473K16
C	222		CKSQYB334K16
C	223		CKSQYB474K16
C	224		CKSRYB104K16
C	225		CKSRYB272K50
C	226		CKSRYB682K25
C	902		CCSRCH270J50
C	904		CKSRYB223K25
C	905		CKSRYB103K50
C	906		CCSRCH100D50
C	907		CCSRCH150J50
C	909		CCSRCH100D50
C	910		CKSRYB332K50
C	912		CKSQYB474K16
C	913		CKSRYB223K25
C	914		CKSRYB682K25
C	915		CKSQYB223K25
C	916		CKSQYB474K16
C	917		CKSYB475K10
C	918		CKSRYB223K25

Circuit Symbol	No.	Part Name	Part No.
C	919		CKSQYB225K10
C	920		CCSRCH270J50
C	921		CCSRCH270J50
C	922		CKSYB105K16
C	923		CKSRYB103K50

B Unit Number : CWE1501(KEH-P8850/ES)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

Circuit Symbol	No.	Part Name	Part No.
IC	1	IC	PML002A
IC	2	IC	PM4008A
IC	3	IC	BR9010FV
Q	1	Transistor	2SC4081
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	51	Transistor	2SC4081
Q	201	FET	2SK932
Q	202	Transistor	DTC124EU
Q	204	Transistor	2SC4081
D	1	Diode	KV1410(23)
D	2	Diode	1SV248
D	6	Diode	KV1410(23)
D	201	Diode	MA143
D	202	Diode	MA147
D	903	Diode	KV1410(23)
D	904	Diode	SVC253
L	1	Coil	CTC1155
L	3	Inductor	LCTB1R5K2125
L	4	Coil	CTC1155
L	201	Inductor	LCTB330K1608
L	202	Inductor	CTF1287
L	203	Inductor	LCTA121J3225
L	901	Coil	CTC1154
L	902	Inductor	LCTA3R3J3225
L	904	Inductor	LCTBR47K1608
L	905	Inductor	LCTBR47K1608
T	51	Coil	CTE1132
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442
CF	202	Ceramic Filter	CTF1476
X	901	Crystal Resonator 10.250MHz	CSS1432

RESISTORS

Circuit Symbol	No.	Part Name	Part No.
R	1		RS1/16S183J
R	2		RS1/16S103J
R	5		RS1/16S0R0J
R	7		RS1/16S273J
R	8		RS1/16S473J
R	9		RS1/16S223J
R	10		RS1/16S473J
R	11		RS1/16S221J
R	12		RS1/16S103J
R	13		RS1/16S104J
R	16		RS1/16S223J
R	17		RS1/16S221J
R	18		RS1/16S221J
R	19		RS1/16S473J
R	20		RS1/16S470J
R	31		RS1/16S0R0J
R	51		RS1/16S470J
R	52		RS1/16S103J
R	53		RS1/16S103J
R	54		RS1/16S331J
R	55		RS1/16S331J
R	56		RS1/16S560J
R	57		RS1/16S560J
R	58		RS1/16S102J
R	59		RS1/16S225J
R	60		RS1/16S133J
R	61		RS1/16S433J
R	101		RS1/16S333J
R	102		RS1/16S103J
R	103		RS1/16S333J
R	104		RS1/16S562J
R	106		RS1/16S0R0J
R	108		RS1/16S0R0J
R	110		RS1/16S154J
R	111		RS1/16S273J
R	113		RS1/16S222J
R	114		RS1/16S333J
R	115		RS1/16S334J
R	116		RS1/16S473J
R	202		RS1/16S472J
R	203		RS1/16S225J
R	204		RS1/16S102J
R	205		RS1/16S220J
R	206		RS1/16S471J
R	208		RS1/16S104J
R	209		RS1/16S104J
R	210		RS1/16S563J
R	213		RS1/16S223J
R	902		RS1/16S103J
R	904		RS1/16S473J
R	907		RS1/16S103J
R	908		RS1/16S681J
R	909		RS1/16S473J
R	914		RS1/16S562J

CAPACITORS

Circuit Symbol	No.	Part Name	Part No.
C	1		CCSQCH4R0C50
C	6		CKSQYB105K10
C	8		CKSRYB222K50
C	10		CCSRCH220J50
C	11		CCSRCH150J50
C	12		CCSRCH8R0D50
C	14		CCSRCJ3R0C50
C	15		CKSRYB103K50
C	16		CKSRYB222K50
C	17		CKSRYB222K50
C	18		CCSRCJ3R0C50
C	19		CKSRYB103K50
C	20		CKSRYB103K50
C	21		CKSRYB103K50
C	24		CKSQYB334K16
C	26		CKSRYB472K50
C	30		CCSRCH220J50
C	32		CCSRCH470J50
C	35		CKSRYB103K50
C	51		CKSRYB103K50
C	52		CKSRYB473K16
C	53		CCSRCK2R0C50
C	54		CKSRYB103K50
C	55		CKSRYB104K16
C	56		CKSRYB104K16
C	58		CKSQYB224K16
C	101		CEALNP100M10
C	102		CCSRCH151J50
C	103		CKSRYB473K16
C	105		CKSRYB682K25
C	106		CEALR68M50
C	107		CKSRYB103K50
C	108		CKSQYB474K16
C	109		CKSQYB474K16
C	110		CKSRYB104K16

Circuit Symbol and No.		Part Name	Part No.
C	111		CKSRYB104K16
C	112		CKSRYB104K16
C	113		CKSRYB123K25
C	114		CEAL220M6R3
C	115		CKSRYB473K16
C	116		CEAL2R2M50
C	117		CKSRYB102K50
C	120		CKSRYB183K25
C	121		CKSRYB332K50
C	122		CKSRYB562K25
C	123		CKSRYB681K50
C	125		CKSRYB103K50
C	126		CKSRYB103K50
C	127		CEAL2R2M50
C	128		CKSRYB103K50
C	201		CCSRCH471J50
C	202		CCSRCH100D50
C	203		CKSRYB104K16
C	204		CKSRYB332K50
C	205		CKSRYB103K50
C	206		CKSRYB104K16
C	207		CKSRYB473K16
C	208		CCSRCH560J50
C	209		CEAL470M6R3
C	210		CKSRYB103K50
C	211		CKSRYB103K50
C	212		CCSRCH101J50
C	215		CKSRYB223K25
C	216		CKSQYB334K16
C	217		CKSRYB103K50
C	219		CKSQYB105K10
C	220		CKSRYB104K16
C	221		CKSRYB473K16
C	222		CKSQYB334K16
C	223		CKSQYB474K16
C	224		CKSRYB104K16
C	225		CKSRYB272K50
C	226		CKSRYB682K25
C	902		CCSRCH270J50
C	904		CKSRYB223K25
C	905		CKSRYB103K50
C	906		CCSRTH100D50
C	907		CCSRTH150J50
C	909		CCSRTH100D50
C	910		CKSRYB332K50
C	912		CKSQYB474K16
C	913		CKSRYB223K25
C	914		CKSRYB682K25
C	915		CKSQYB223K25
C	916		CKSQYB474K16
C	917		CKSYB475K10
C	918		CKSRYB223K25
C	919		CKSQYB225K10
C	920		CCSRCH270J50
C	921		CCSRCH270J50
C	922		CKSYB105K16
C	923		CKSRYB103K50

C Unit Number : CWM6225(KEH-P8800R/EW)
(KEH-P8800R-W/EW)
Unit Name : Keyboard Unit

MISCELLANEOUS

Circuit Symbol and No.		Part Name	Part No.
IC	1901	IC	PD5471A
IC	1902	IC	PD8051A
IC	1903	HIC Module	RS-140
Q	1901	Transistor	DTC143TK
Q	1902	Transistor	IMH10A
Q	1903	Transistor	IMH10A
Q	1904	Transistor	IMH10A
Q	1905	Transistor	IMH10A
Q	1906	Transistor	IMH10A
D	1901	Diode Network	DA204U
D	1902	Diode Network	DA204U
D	1904	Diode	MA110
D	1905	LED	CL170UBX
L	1901	Chip Inductor	LCTA2R2J3225
L	1902	Chip Inductor	LCTA2R2J3225
L	1903	Inductor	CTF1484
L	1904	Inductor	LCTA220J2520
L	1905	Inductor Array	CTF1421
L	1906	Inductor Array	CTF1421
L	1907	Inductor	CTF1295
L	1908	Inductor	CTF1295
X	1901	Ceramic Resonator 15.62MHz	CSS1458
S	1901	Push Switch	CSG1113
S	1902	Push Switch	CSG1113
S	1903	Push Switch	CSG1111
S	1904	Push Switch	CSG1111
S	1905	Push Switch	CSG1113
S	1906	Push Switch	CSG1113
S	1907	Push Switch	CSG1113
S	1908	Push Switch	CSG1113
S	1909	Push Switch	CSG1113
S	1910	Push Switch	CSG1113
S	1911	Push Switch	CSG1113
S	1912	Push Switch	CSG1113
S	1913	Push Switch	CSG1113
S	1914	Push Switch	CSG1113
S	1915	Push Switch	CSG1113
S	1916	Push Switch	CSG1113
S	1917	Push Switch	CSG1113
S	1918	Push Switch	CSG1113
S	1919	Push Switch	CSG1113
S	1920	Push Switch	CSG1113
S	1921	Push Switch	CSG1113
S	1922	Push Switch	CSG1113
S	1923	Push Switch	CSG1113
S	1924	Push Switch	CSG1113
S	1925	Push Switch	CSG1111

RESISTORS

Circuit Symbol and No.		Part Name	Part No.
R	1901		RS1/16S154J
R	1902		RS1/16S473J
R	1903		RA4C101J
R	1904		RA3C101J
R	1905		RA3C101J
R	1906		RA4C101J
R	1907		RS1/16S473J
R	1908		RA3C101J
R	1909		RA3C101J
R	1910		RA4C101J
R	1911		RA4C101J
R	1912		RA4C101J
R	1913		RA3C101J
R	1914		RA4C101J
R	1915		RA4C101J
R	1922		RS1/10S121J
R	1923		RS1/10S2R2J
R	1924		RS1/8S222J
R	1925		RS1/8S222J
R	1930		RS1/16S472J
R	1931		RS1/16S473J
R	1951		RS1/8S242J
R	1952		RS1/8S242J
R	1953		RS1/10S103J
R	1954		RS1/8S242J

=====Circuit Symbol and No.		===Part Name	Part No.
R	1955		RS1/8S242J
R	1960		RS1/8S911J
R	1961		RS1/8S911J
R	1962		RS1/10S511J
R	1963		RS1/10S511J
R	1964		RS1/10S511J
R	1965		RS1/10S511J
R	1966		RS1/8S511J
R	1967		RS1/8S511J
R	1968		RS1/8S511J
R	1969		RS1/8S511J
R	1970		RS1/8S511J
R	1971		RS1/8S511J
R	1972		RS1/8S511J
R	1973		RS1/8S511J
R	1974		RS1/8S751J
R	1975		RS1/8S751J
R	1976		RS1/8S751J
R	1977		RS1/8S751J

CAPACITORS

C	1901		CKSQYB105K10
C	1902		CKSRYB103K25
C	1903		CSZS100M6R3
C	1904		CSZS100M6R3
C	1906		CKSQYB103K25
C	1907		CSZS100M6R3
C	1908		CKSRYB473K16
C	1911		CKSRYB473K16
C	1914		CKSRYB103K25
C	1916		CKSQYB104K25
C	1917		CSZSR100M16
C	1918		CKSRYB102K50
C	1919		CCSQCH221J50

C Unit Number : CWM6226(KEH-P8850/ES)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	1901	IC	PD5471A
IC	1902	IC	PD8051A
IC	1903	HIC Module	RS-140
D	1901	Diode Network	DA204U
D	1902	Diode Network	DA204U
D	1904	Diode	MA110
D	1905	LED	CL170UBX
L	1901	Chip Inductor	LCTA2R2J3225
L	1902	Chip Inductor	LCTA2R2J3225
L	1903	Inductor	CTF1484
L	1904	Inductor	LCTA220J2520
L	1905	Inductor Array	CTF1421
L	1906	Inductor Array	CTF1421
L	1907	Inductor	CTF1295
L	1908	Inductor	CTF1295
X	1901	Ceramic Resonator 15.62MHz	CSS1458
S	1901	Push Switch	CSG1112
S	1902	Push Switch	CSG1112
S	1903	Push Switch	CSG1111
S	1904	Push Switch	CSG1111
S	1905	Push Switch	CSG1112
S	1906	Push Switch	CSG1112
S	1907	Push Switch	CSG1112
S	1908	Push Switch	CSG1112
S	1909	Push Switch	CSG1112
S	1910	Push Switch	CSG1112
S	1911	Push Switch	CSG1112
S	1912	Push Switch	CSG1112
S	1913	Push Switch	CSG1112

=====Circuit Symbol and No.		===Part Name	Part No.
S	1914	Push Switch	CSG1112
S	1915	Push Switch	CSG1112
S	1916	Push Switch	CSG1112
S	1917	Push Switch	CSG1112
S	1918	Push Switch	CSG1112
S	1919	Push Switch	CSG1112
S	1920	Push Switch	CSG1112
S	1921	Push Switch	CSG1112
S	1922	Push Switch	CSG1112
S	1923	Push Switch	CSG1112
S	1924	Push Switch	CSG1112
S	1925	Push Switch	CSG1111

RESISTORS

R	1901		RS1/16S154J
R	1902		RS1/16S473J
R	1903		RA4C101J
R	1904		RA3C101J
R	1905		RA3C101J
R	1906		RA4C101J
R	1907		RS1/16S473J
R	1908		RA3C101J
R	1909		RA3C101J
R	1910		RA4C101J
R	1911		RA4C101J
R	1912		RA4C101J
R	1913		RA3C101J
R	1914		RA4C101J
R	1915		RA4C101J
R	1922		RS1/10S121J
R	1923		RS1/10S2R2J
R	1924		RS1/8S222J
R	1925		RS1/8S222J
R	1930		RS1/16S472J
R	1931		RS1/16S473J
R	1956		RS1/10S0R0J
R	1957		RS1/10S0R0J
R	1958		RS1/10S0R0J
R	1959		RS1/10S0R0J
R	1960		RS1/8S911J
R	1961		RS1/8S911J
R	1962		RS1/10S511J
R	1963		RS1/10S511J
R	1964		RS1/10S511J
R	1965		RS1/10S511J
R	1966		RS1/8S511J
R	1967		RS1/8S511J
R	1968		RS1/8S511J
R	1969		RS1/8S511J
R	1970		RS1/8S511J
R	1971		RS1/8S511J
R	1972		RS1/8S511J
R	1973		RS1/8S511J
R	1974		RS1/8S751J
R	1975		RS1/8S751J
R	1976		RS1/8S751J
R	1977		RS1/8S751J

CAPACITORS

C	1901		CKSQYB105K10
C	1902		CKSRYB103K25
C	1903		CSZS100M6R3
C	1904		CSZS100M6R3
C	1906		CKSQYB103K25
C	1907		CSZS100M6R3
C	1908		CKSRYB473K16
C	1911		CKSRYB473K16
C	1914		CKSRYB103K25
C	1916		CKSQYB104K25

=====Circuit Symbol and No.		===Part Name	Part No.
C	1917		CSZSR100M16
C	1918		CKSRYB102K50
C	1919		CCSQCH221J50

D Unit Number :
Unit Name : Switch PCB

S	951	Switch(CLOSE)	CSN1012
S	952	Switch(OPEN)	CSN1022

E Unit Number : EWM1018
Unit Name : Deck Unit

MISCELLANEOUS

IC	251	IC	CXA2560Q
IC	351	IC	PA2020A
D	352	Diode	1SS355
VR	301	Semi-fixed 33kΩ(B)	CCP1280
VR	302	Semi-fixed 33kΩ(B)	CCP1280

RESISTORS

R	255		RS1/16S221J
R	256		RS1/16S221J
R	257		RS1/16S102J
R	258		RS1/16S102J
R	271		RS1/16S102J
R	272		RS1/16S102J
R	273		RS1/16S102J
R	274		RS1/16S102J
R	281		RS1/8S0R0J
R	282		RS1/8S0R0J
R	283		RS1/8S0R0J
R	284		RS1/8S0R0J
R	285		RS1/16S0R0J
R	286		RS1/16S0R0J
R	287		RS1/8S0R0J
R	290		RS1/8S0R0J
R	301		RS1/16S183J
R	322		RS1/16S102J
R	323		RS1/8S0R0J
R	351		RS1/16S102J
R	352		RS1/16S102J
R	353		RS1/16S102J
R	354		RS1/16S102J
R	355		RS1/10S274J
R	362		RS1/8S181J
R	373		RS1/8S0R0J
R	374		RS1/8S0R0J
R	375		RS1/8S0R0J
R	401		RS1/16S472J
R	402		RS1/16S163J
R	403		RS1/16S823J

CAPACITORS

C	251		CKSRYB331K50
C	252		CKSRYB331K50
C	253		CKSRYB331K50
C	254		CKSRYB331K50
C	255		CKSRYB103K25
C	256		CKSRYB103K25
C	272		CKSQYB104K16
C	273		CEJA220M16
C	301		CKSYB104K50
C	302		CKSYB104K50
C	309		CKSQYB104K16
C	310		CKSQYB104K16
C	313		CCSQCH101K50
C	351		CKSYB224K25
C	352		CKSQYB392K50

=====Circuit Symbol and No.		===Part Name	Part No.
C	353		CKSQYB103K50
C	354		CKSQYB103K50
C	355		CKSYB104K50
C	356		CKSQYB103K50
C	401		CKSQYB334K16
C	402		CKSQYB472K50
C	403		CKSQYB683K16

F Unit Number :
Unit Name : PCB Unit

S	1	Switch (LOAD)	ESG1004
S	2	Switch (70μS)	ESG1004
EGN	1	Photo-Interrupter	EGN1005

G Unit Number :
Unit Name : Reel PCB

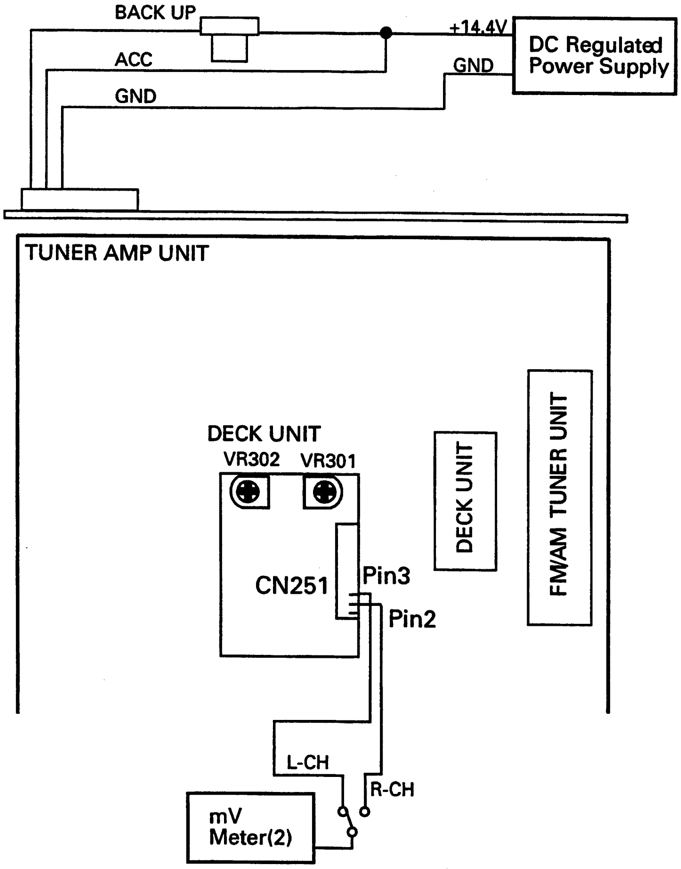
EGN	2	Photo-Interrupter	EGN1006
EGN	3	Photo-Interrupter	EGN1006

Miscellaneous Parts List

M	1	Motor Unit (MAIN)	EXA1490
M	2	Motor Unit (SUB)	EXA1485
M	951	Motor(AUTO FLAP)	CXM1085
HD	1	Head Assy	EXA1506
S	953	Switch (HALF LOADING)	CSN1022

6. ADJUSTMENT

● Connection Diagram


BACK UP
ACC
GND
+14.4V
GND
DC Regulated Power Supply
TUNER AMP UNIT
DECK UNIT
VR302
VR301
CN251
Pin3
Pin2
DECK UNIT
FM/AM TUNER UNIT
L-CH
R-CH
mV Meter(2)

DOLBY B NR ADJUSTMENT

No.	Test Tape	Adjustment Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz,200nwb/m)	VR301(Lch),VR302(Rch)	mV Meter(2) : -6dBs±1.0dB (DOLBY NR Switch : OFF)

7. GENERAL INFORMATION

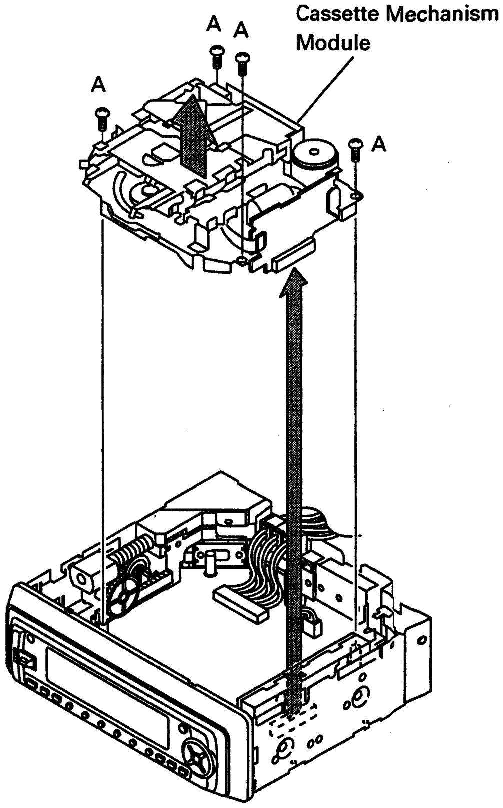
7.1 DISASSEMBLY

● Removing the Case (Not shown)

1. Remove the screw, and then remove the Case.

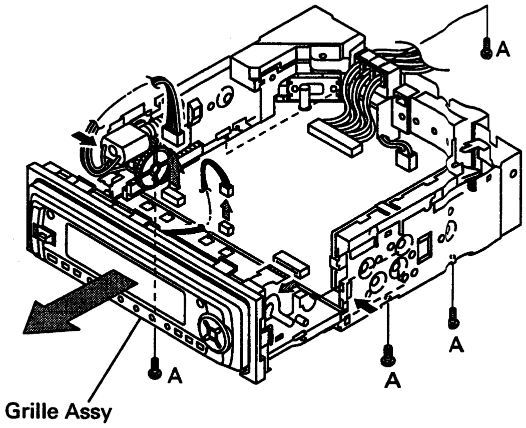
● Removing the Cassette Mechanism Module

1. Remove the four screws A.
2. Disconnect the connector, and then remove the Cassette Mechanism Module.


A
A
A
A
A
Cassette Mechanism Module

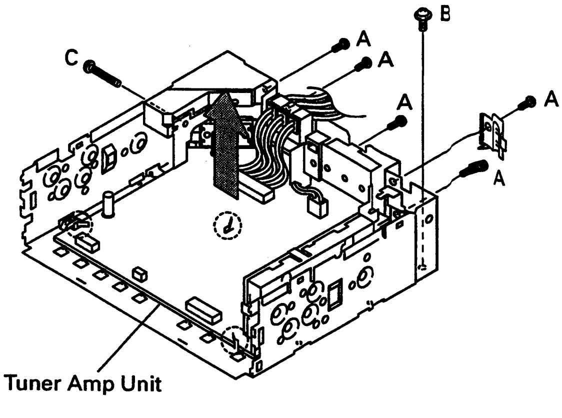
● Removing the Tuner Amp Unit (1/2)

1. Disconnect the three connectors.
2. Remove the four screws A.
3. Disconnect the two stoppers indicated by arrows, and then remove the Grille Assy.


A
A
A
A
Grille Assy

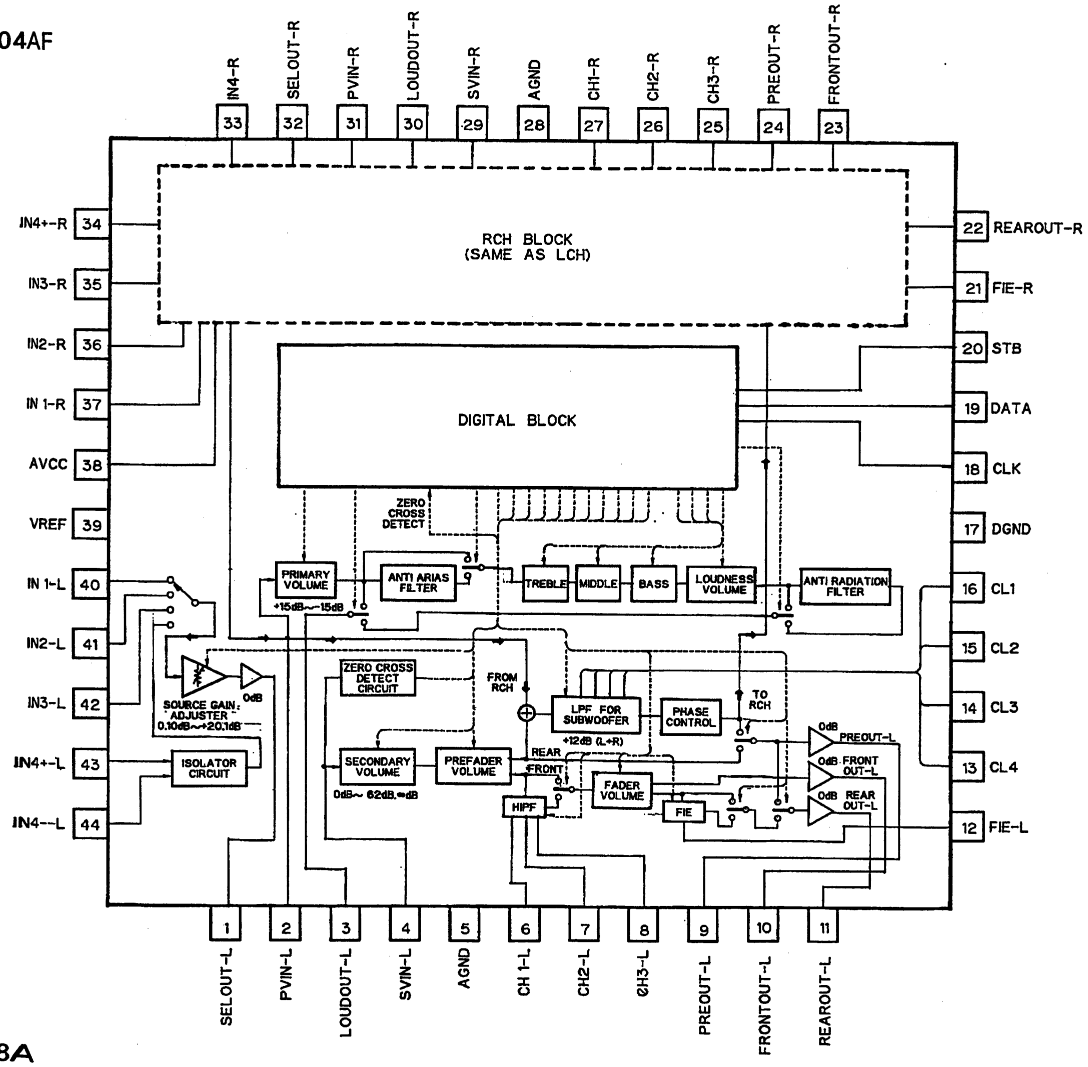
● Removing the Tuner Amp Unit (2/2)

1. Remove the five screws A.
2. Remove the screw B, and C.
3. Stretch the three tabs, and then remove the Tuner Amp Unit.

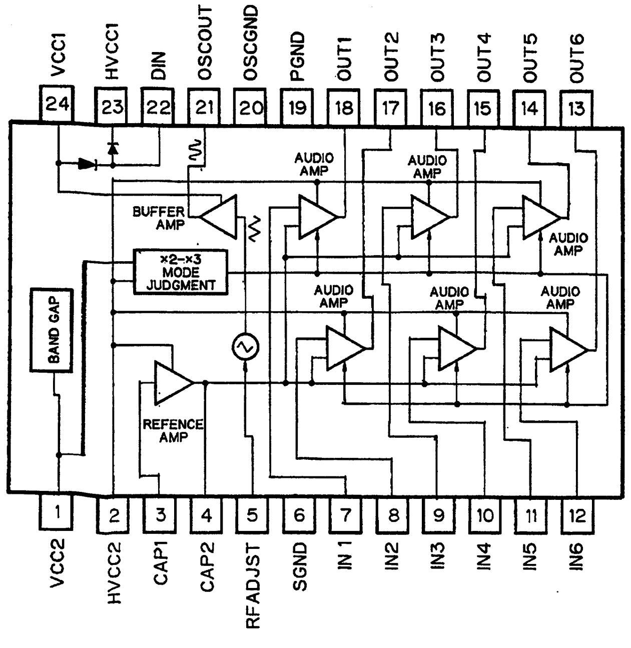

B
A
A
A
A
A
C
Tuner Amp Unit

7.2 IC

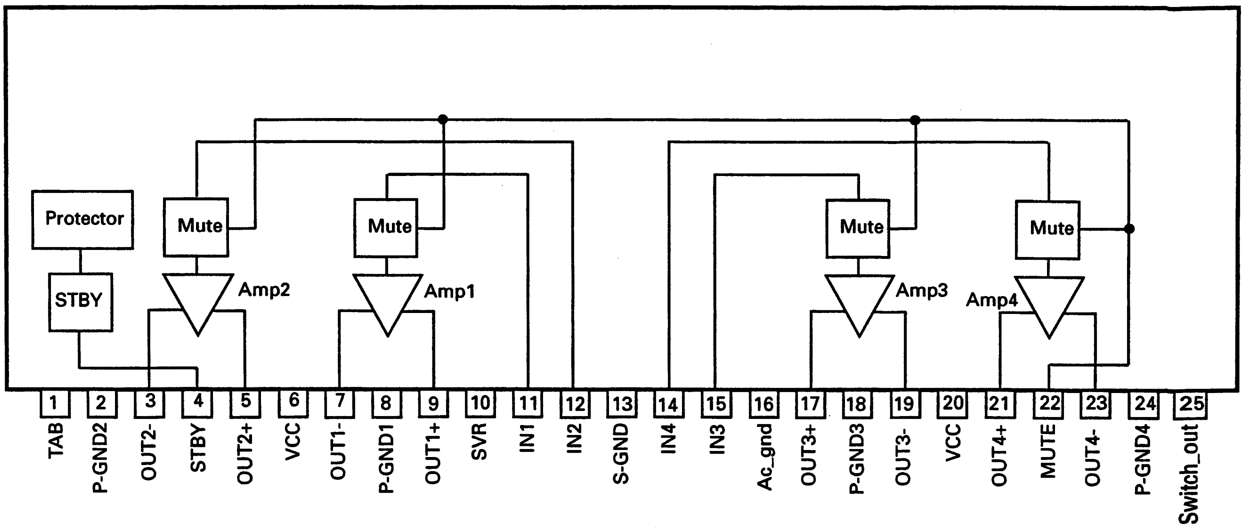
PML004AF


IN4-R
SELOUT-R
PVIN-R
LOUDOUT-R
SVIN-R
AGND
CH1-R
CH2-R
CH3-R
PREOUT-R
FRONTOUT-R
33
32
31
30
29
28
27
26
25
24
23
IN4+-R 34
IN3-R 35
IN2-R 36
IN 1-R 37
AVCC 38
VREF 39
IN 1-L 40
IN2-L 41
IN3-L 42
IN4+-L 43
IN4--L 44
22 REAROUT-R
21 FIE-R
20 STB
19 DATA
18 CLK
17 DGND
16 CL1
15 CL2
14 CL3
13 CL4
12 FIE-L
RCH BLOCK
(SAME AS LCH)
DIGITAL BLOCK
ZERO
CROSS
DETECT
PRIMARY
VOLUME
+15dB~-15dB
ANTI ARIAS
FILTER
TREBLE
MIDDLE
BASS
LOUDNESS
VOLUME
ANTI RADIATION
FILTER
SOURCE GAIN
ADJUSTER
0.10dB~+20.1dB
0dB
ISOLATOR
CIRCUIT
ZERO CROSS
DETECT
CIRCUIT
FROM
RCH
LPF FOR
SUBWOOFER
+12dB (L+R)
PHASE
CONTROL
TO
RCH
0dB
PREOUT-L
0dB FRONT
OUT-L
0dB REAR
OUT-L
SECONDARY
VOLUME
0dB~ 62dB,∞dB
PREFADER
VOLUME
REAR
FRONT
FADER
VOLUME
HIPF
FIE
1
2
3
4
5
6
7
8
9
10
11
SELOUT-L
PVIN-L
LOUDOUT-L
SVIN-L
AGND
CH 1-L
CH2-L
CH3-L
PREOUT-L
FRONTOUT-L
REAROUT-L

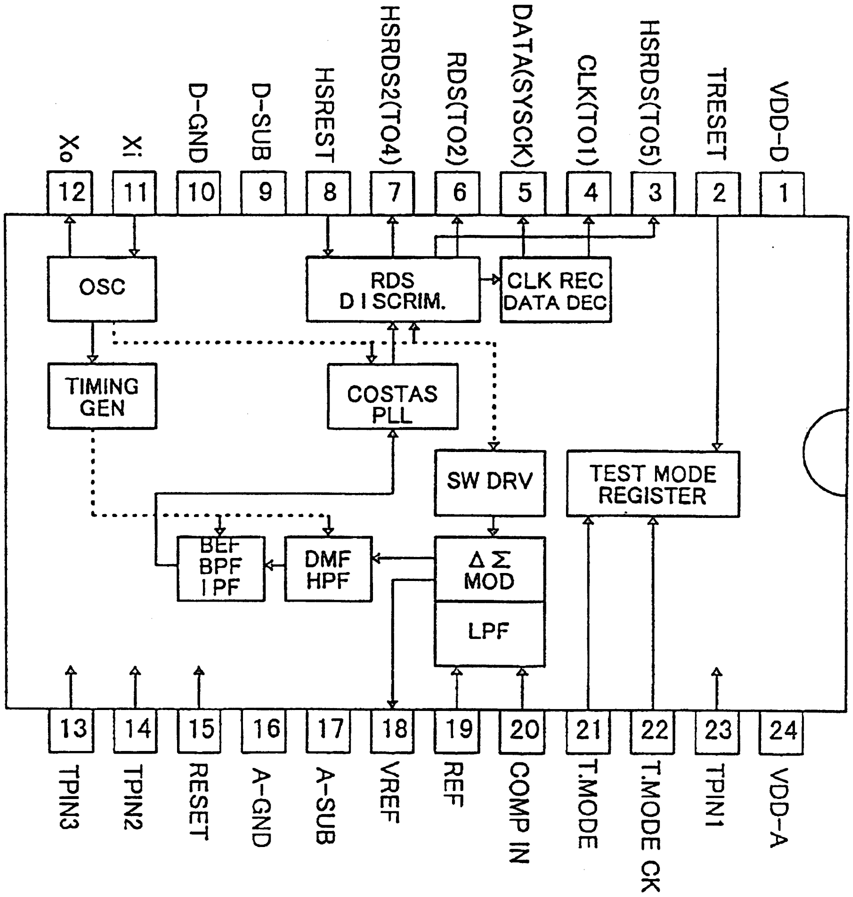
PA2028A


VCC1
HVCC1
DIN
OSCOUT
OSCGND
PGND
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
24
23
22
21
20
19
18
17
16
15
14
13
BUFFER
AMP
AUDIO
AMP
AUDIO
AMP
AUDIO
AMP
×2-×3
MODE
JUDGMENT
AUDIO
AMP
AUDIO
AMP
AUDIO
AMP
BAND GAP
REFENCE
AMP
1
2
3
4
5
6
7
8
9
10
11
12
VCC2
HVCC2
CAP1
CAP2
RFADJST
SGND
IN 1
IN2
IN3
IN4
IN5
IN6

PAL005A


Protector
STBY
Mute
Mute
Mute
Mute
Amp2
Amp1
Amp3
Amp4
1 TAB
2 P-GND2
3 OUT2-
4 STBY
5 OUT2+
6 VCC
7 OUT1-
8 P-GND1
9 OUT1+
10 SVR
11 IN1
12 IN2
13 S-GND
14 IN4
15 IN3
16 Ac_gnd
17 OUT3+
18 P-GND3
19 OUT3-
20 VCC
21 OUT4+
22 MUTE
23 OUT4-
24 P-GND4
25 Switch_out

PM4009A

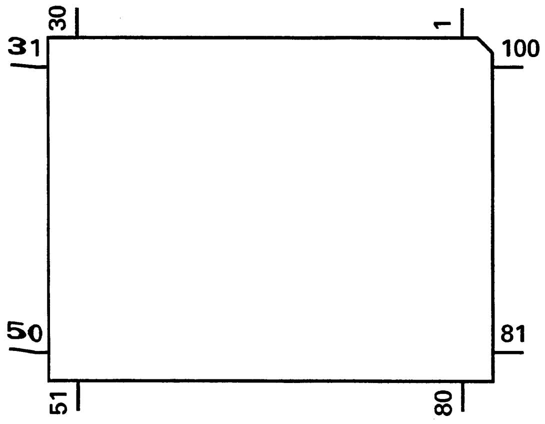

12 Xo
11 Xi
10 D-GND
9 D-SUB
8 HSREST
7 HSRDS2(TO4)
6 RDS(TO2)
5 DATA(SYSCK)
4 CLK(TO1)
3 HSRDS(TO5)
2 TRESET
1 VDD-D
OSC
RDS
D I SCRIM.
CLK REC
DATA DEC
TIMING
GEN
COSTAS
PLL
SW DRV
TEST MODE
REGISTER
BEF
BPF
LPF
DMF
HPF
ΔΣ
MOD
LPF
13 TPIN3
14 TPIN2
15 RESET
16 A-GND
17 A-SUB
18 VREF
19 REF
20 COMP IN
21 T.MODE
22 T.MODE CK
23 TPIN1
24 VDD-A

● Pin Functions (PD5495A, PD5496A)

Pin No.	Pin Name	I/O	Function and Operation
1	TUNPDO	O	PLL data output
2	TUNPCK	O	PLL clock output
3	TUNPCE	O	PLL chip enable output
4	TUNPCE2	O	PLL chip enable output 2
5	MOSENS	I	Motion/window damage sensor input
6	DLSENS	I	Door lock sense input
7	IPPW	O	IP-BUS power supply control output
8,9	VSS1,2		GND
10	ASENBO	O	IP-BUS slave power supply control output
11	TELIN	I	Cellular mute input
12	RESET	I	Reset input
13	XOUT	O	Oscillator connection pin 1
14	VSS3		GND
15	XIN	I	Oscillator connection pin 2
16,17	VCC1, 2		5V
18	RCK	I	RDS clock input
19	LDET	I	PLL lock sense input
20	DALMON	O	DFS alarm output
21	RX2	I	IP-BUS data input 2
22	SYSPW	O	System power supply control output
23	ISENS	I	Illumination sense input
24	PEE	O	Beep tone output
25	RDS57K	I	57kHzBP-OUT sense input
26	FLPPW	O	Flap motor driver power ON/OFF output
27	MUTE	O	Mute output
28	NC		Not used
29	RX1	I	IP-BUS data input
30	TX	O	IP-BUS data output
31-33	NC		Not used
34	FLPOPN	O	Flap motor open output
35	DPDT	O	Display serial data output
36	KYDT	I	Display enable data input
37	FLPCLS	O	Flap motor close output
38	FOPNSW	I	Flap open switch input
39	NC		Not used
40	FCLSSW	I	Flap close switch input
41	DLED	O	Alarm LED output
42	SHELL	I	Shell sense input
43	FLPILM	O	Inside of flap illumination output
44	ILMPW	O	Illumination power supply control output
45	SWVDD	O	Display chip select output
46	OELPW	O	OEL module power supply control output
47	DSENS	I	Grille detach sense input
48	ST	I	FM stereo input
49	SD	I	SD input
50	MS	I	MS sense input
51	DIRO	O	Head F/R select output
52	PLAY	O	MS gain select output
53	METAL	I	Metal switch sense input
54	NR	O	Noise reduction output
55	LOAD	I	Load switch sense input
56	POS	I	Position sense input
57	RES	I	Reverse sense input
58	NES	I	Normal reel sense input
59,60	SC2, 1	O	Sub motor control output
61	CM	O	Not used
62	VCC3		5V
63	STBY	O	Stand-by output

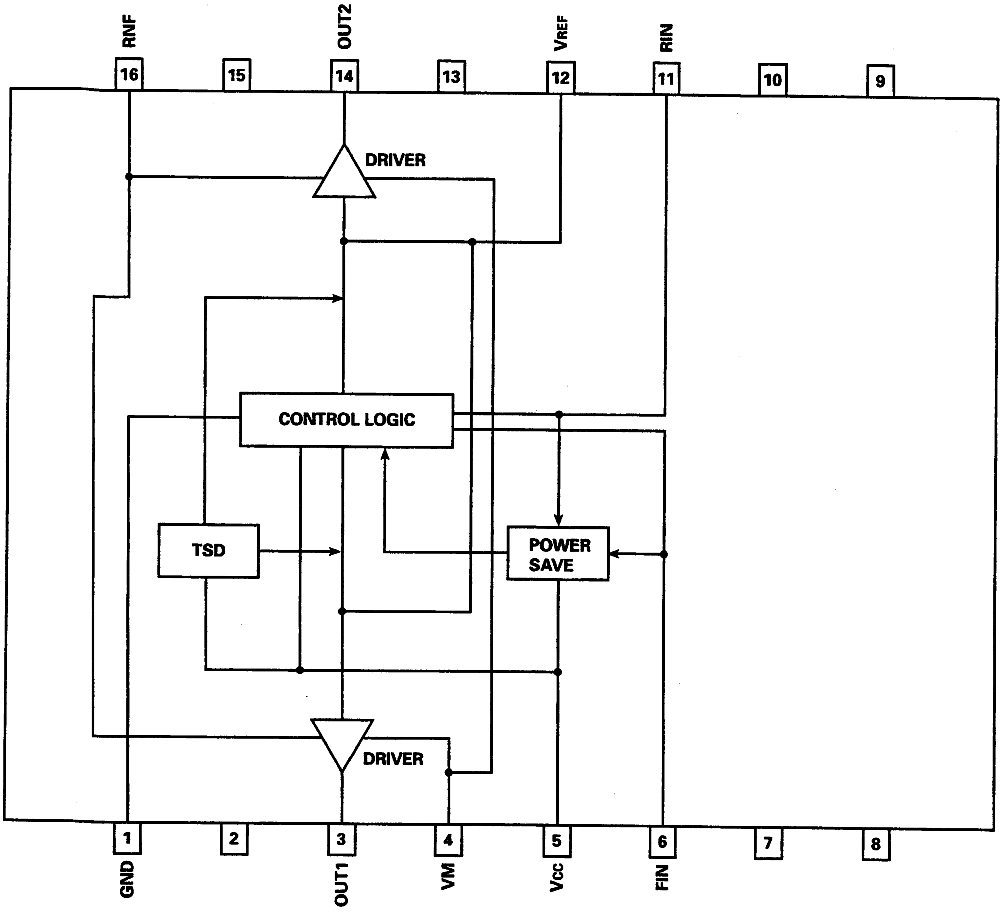
Pin No.	Pin Name	I/O	Function and Operation
64	VSS4		GND
65	VCK	O	E-VOL clock output
66	VDT	I	E-VOL data input
67	VST	I	E-VOL strobe pulse input
68	ROMCS	O	ROM correction chip select output
69-72	NC		Not used
73	$\overline{\mathrm{BSENS}}$	I	Back up power sense input
74	$\overline{\mathrm{ASENS}}$	I	ACC power sense input
75	NC		Not used
76	DRELAY	O	External relay output
77	LOCH	O	Local "H" output
78	LOCL	O	Local "L" output
79	TAPEMUTE	O	RINT mute output
80	NC		Not used
81	FM/AM	O	FM/AM power select output
82	$\overline{\mathrm{TMUTE}}$	O	Tuner mute output
83	$\overline{\mathrm{DRST}}$	O	RDS decoder reset output
84	$\overline{\mathrm{RDSLK}}$	I	RDS lock signal input
85	RDT	I	RDS data input
86	DRSENS	I	Door open/close sense input
87	DRSYS	O	Door system select output
88	TESTIN	I	Test mode IN/test enable
89	SK	I	SK signal input
90	$\overline{\mathrm{CURRQ}}$	O	Tuner voltage FIX output
91	LEVELR	I	Level meter "R" AD input
92	LEVELL	I	Level meter "L" AD input
93	NC		Not used
94	SDBW	I	SD input
95	NL	I	Noise level input
96	VSS5		GND
97	SL	I	Signal level input
98	VREF		A/D converter reference voltage
99	VCC4		5V
100	TUNPDI	I	PLL data input

*PD5495A,PD5496A

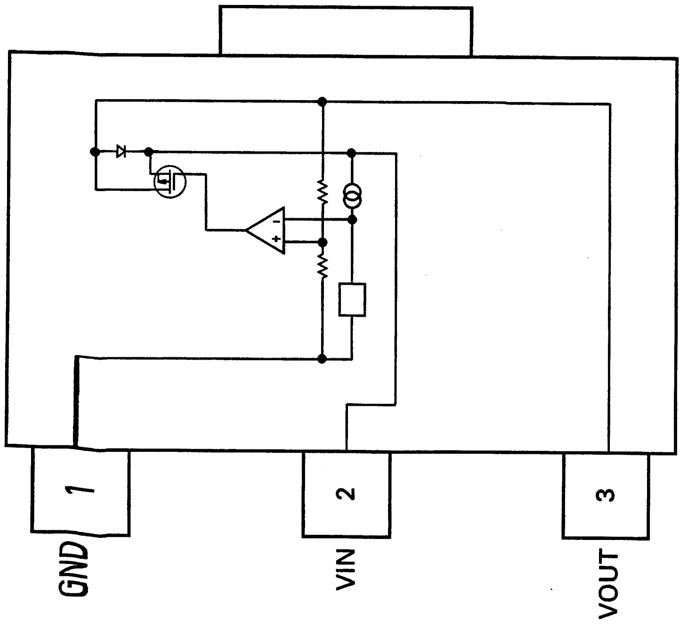


IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

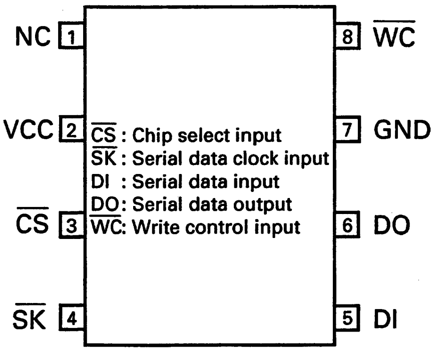
BA6288FS


RNF
OUT2
VREF
RIN
16
15
14
13
12
11
10
9
DRIVER
CONTROL LOGIC
TSD
POWER SAVE
DRIVER
1
2
3
4
5
6
7
8
GND
OUT1
VM
Vcc
FIN

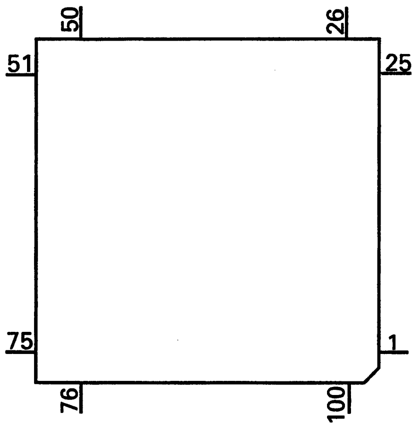
S-81250SGUP


1
2
3
GND
VIN
VOUT

BR9010FV


NC 1
VCC 2
CS 3
SK 4
8 WC
7 GND
6 DO
5 DI
CS : Chip select input
SK : Serial data clock input
DI : Serial data input
DO: Serial data output
WC: Write control input

*PD5471A

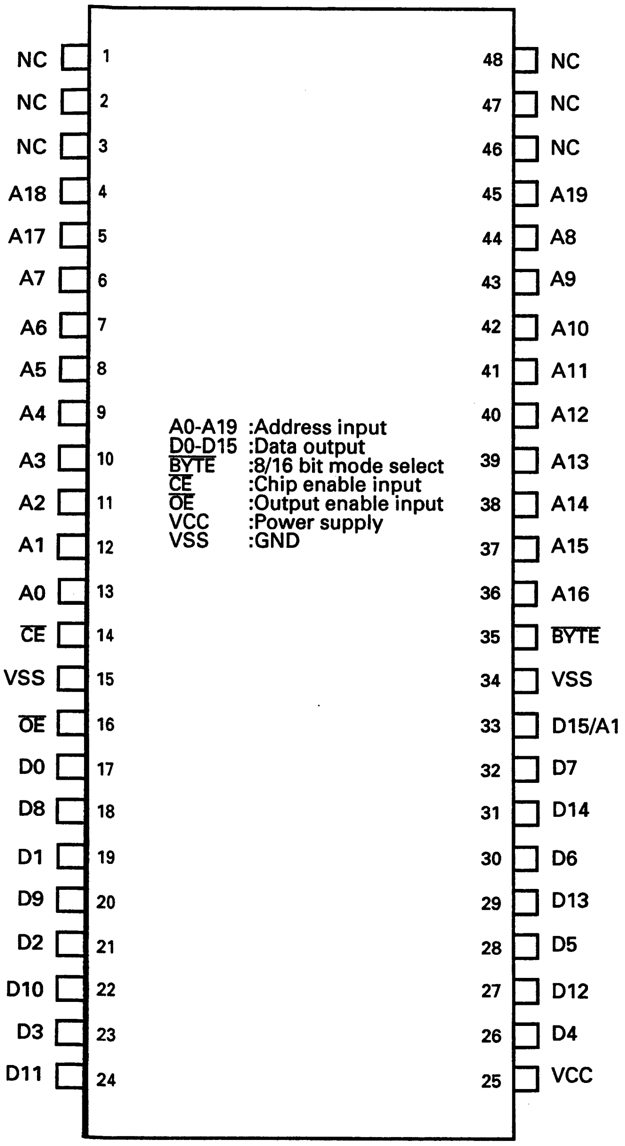

50
26
51
25
75
1
76
100

● Pin Functions (PD5471A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1–4	NC			Not used
5	REM	I		Remote control reception
6	BYTE	I		External data BUS width select input
7	CNVSS	I		Processor mode select input
8,9	NC			Not used
10	RESET	I		Reset input
11	XOUT	O		Crystal oscillating element connection pin
12	VSS			GND
13	XIN	I		Crystal oscillating element connection pin
14	VDD			VDD
15	NMI	I		NMI input
16	NC			Not used
17–20	KD1-4	I		Key data 1-4
21–26	KS1-6	I/O		Key strobe input/output 1-6
27–31	NC			Not used
32	ILMD	O	C	Dual illumination
33	KYDT	O	C	Key data output
34	DPDT	I		Display data input
35	NC			Not used
36	OEL	O	C	OEL controller ON
37	RDY	I		OEL controller ready input
38	NC			Not used
39	HOLD	I		Hold input
40,41	NC			Not used
42	RD	O	C	Read strobe
43	BHE	O	C	Write High byte enable
44	WR	O	C	Write strobe
45	NC			Not used
46	CS2	O	C	Bank address (High)
47	CS1	O	C	Bank address (Low)
48	CS0	O	C	External ROM chip select
49–59	A19-9	O	C	Address bus Output 19bit-9bit
60	VDD			VDD
61	A8	O	C	Address bus Output 8bit
62	VSS			GND
63–70	A7-0	O	C	Address bus Output 7bit-0bit
71–86	D15-0	I/O		Data bus 15bit-0bit
87–100	NC			Not used

Format	Meaning
C	C MOS

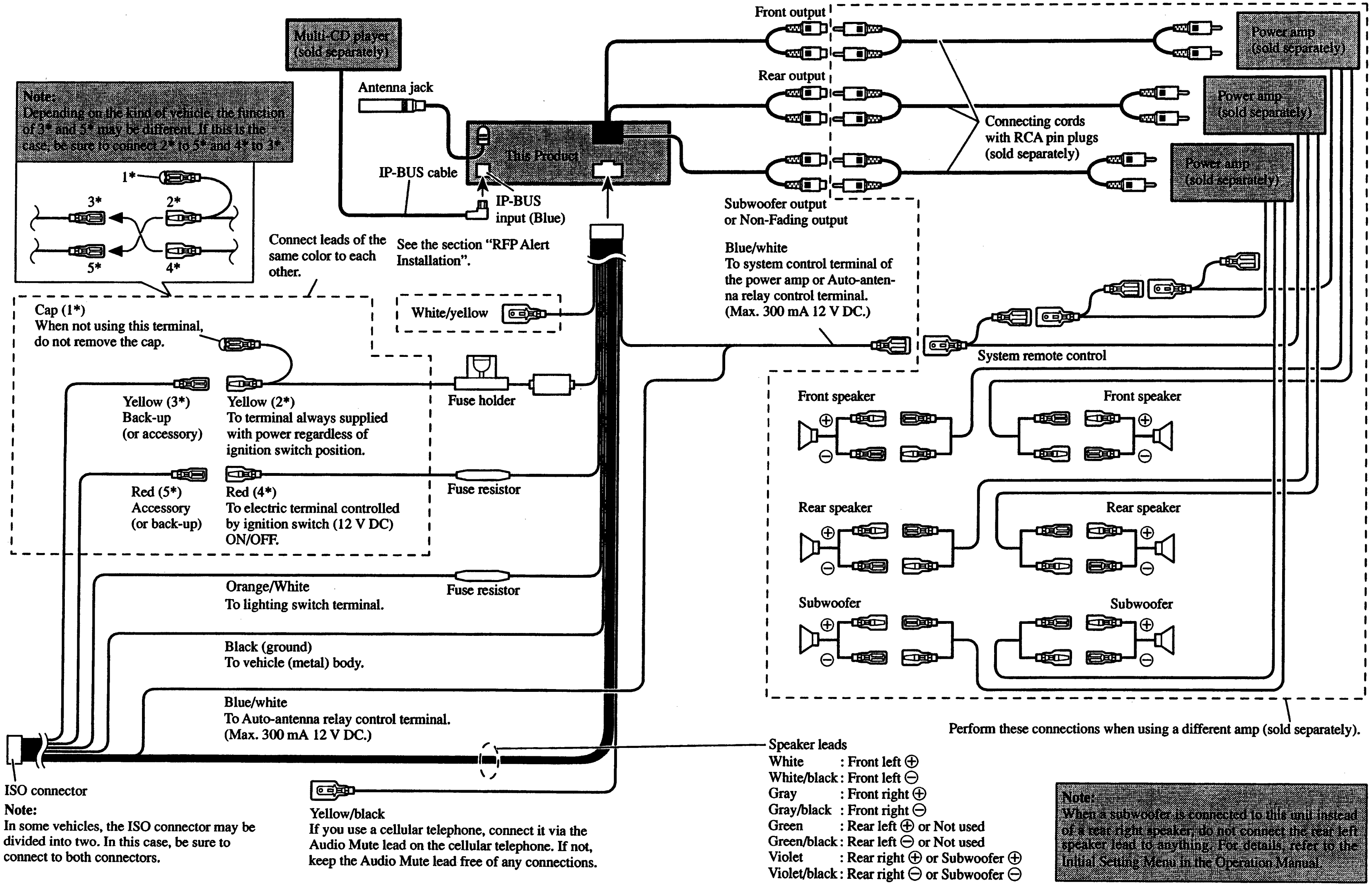
PD8051A


NC 1
NC 2
NC 3
A18 4
A17 5
A7 6
A6 7
A5 8
A4 9
A3 10
A2 11
A1 12
A0 13
$\overline{CE}$ 14
VSS 15
$\overline{OE}$ 16
D0 17
D8 18
D1 19
D9 20
D2 21
D10 22
D3 23
D11 24
25 VCC
26 D4
27 D12
28 D5
29 D13
30 D6
31 D14
32 D7
33 D15/A1
34 VSS
35 $\overline{BYTE}$
36 A16
37 A15
38 A14
39 A13
40 A12
41 A11
42 A10
43 A9
44 A8
45 A19
46 NC
47 NC
48 NC

A0-A19 :Address input
D0-D15 :Data output
$\overline{BYTE}$:8/16 bit mode select
$\overline{CE}$:Chip enable input
$\overline{OE}$:Output enable input
VCC :Power supply
VSS :GND

8. OPERATIONS AND SPECIFICATIONS

● Connection Diagram (KEH-P8800R/EW, KEH-P8800R-W/EW)


Multi-CD player (sold separately)
Antenna jack
IP-BUS cable
This Product
IP-BUS input (Blue)
See the section "RFP Alert Installation".
Connect leads of the same color to each other.
1*
2*
3*
4*
5*
White/yellow
Cap (1*)
When not using this terminal, do not remove the cap.
Fuse holder
Yellow (3*)
Back-up
(or accessory)
Yellow (2*)
To terminal always supplied with power regardless of ignition switch position.
Fuse resistor
Red (5*)
Accessory
(or back-up)
Red (4*)
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Orange/White
To lighting switch terminal.
Fuse resistor
Black (ground)
To vehicle (metal) body.
Blue/white
To Auto-antenna relay control terminal.
(Max. 300 mA 12 V DC.)
ISO connector
Yellow/black
Front output
Rear output
Subwoofer output
or Non-Fading output
Connecting cords
with RCA pin plugs
(sold separately)
Power amp
(sold separately)
Power amp
(sold separately)
Power amp
(sold separately)
Blue/white
To system control terminal of the power amp or Auto-antenna relay control terminal.
(Max. 300 mA 12 V DC.)
System remote control
Front speaker
Front speaker
Rear speaker
Rear speaker
Subwoofer
Subwoofer
⊕
⊖
Perform these connections when using a different amp (sold separately).
Speaker leads

Note:
Depending on the kind of vehicle, the function of 3* and 5* may be different. If this is the case, be sure to connect 2* to 5* and 4* to 3*.

ISO connector

Note:
In some vehicles, the ISO connector may be divided into two. In this case, be sure to connect to both connectors.

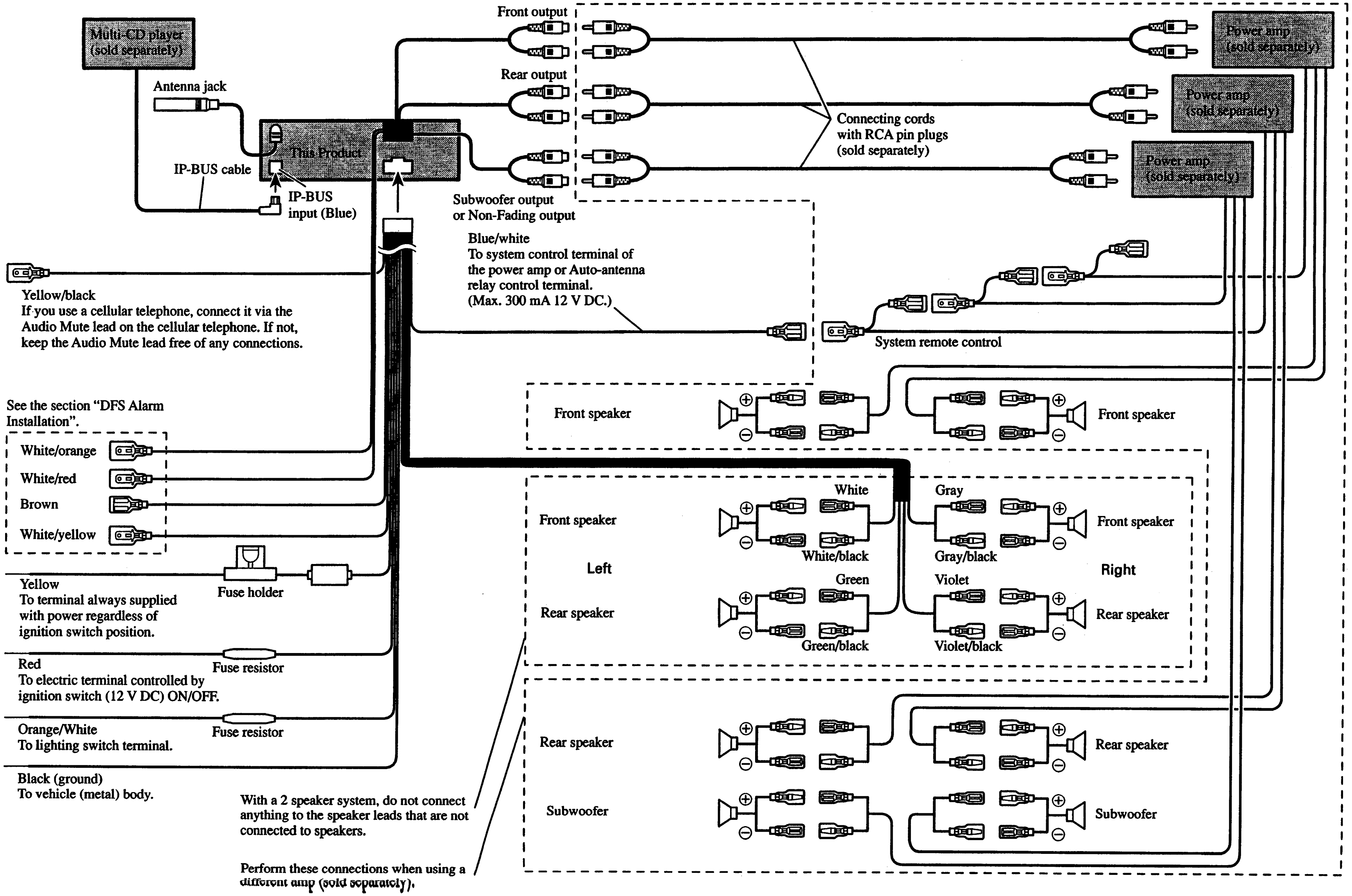
Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.

Speaker leads

White	: Front left ⊕
White/black	: Front left ⊖
Gray	: Front right ⊕
Gray/black	: Front right ⊖
Green	: Rear left ⊕ or Not used
Green/black	: Rear left ⊖ or Not used
Violet	: Rear right ⊕ or Subwoofer ⊕
Violet/black	: Rear right ⊖ or Subwoofer ⊖

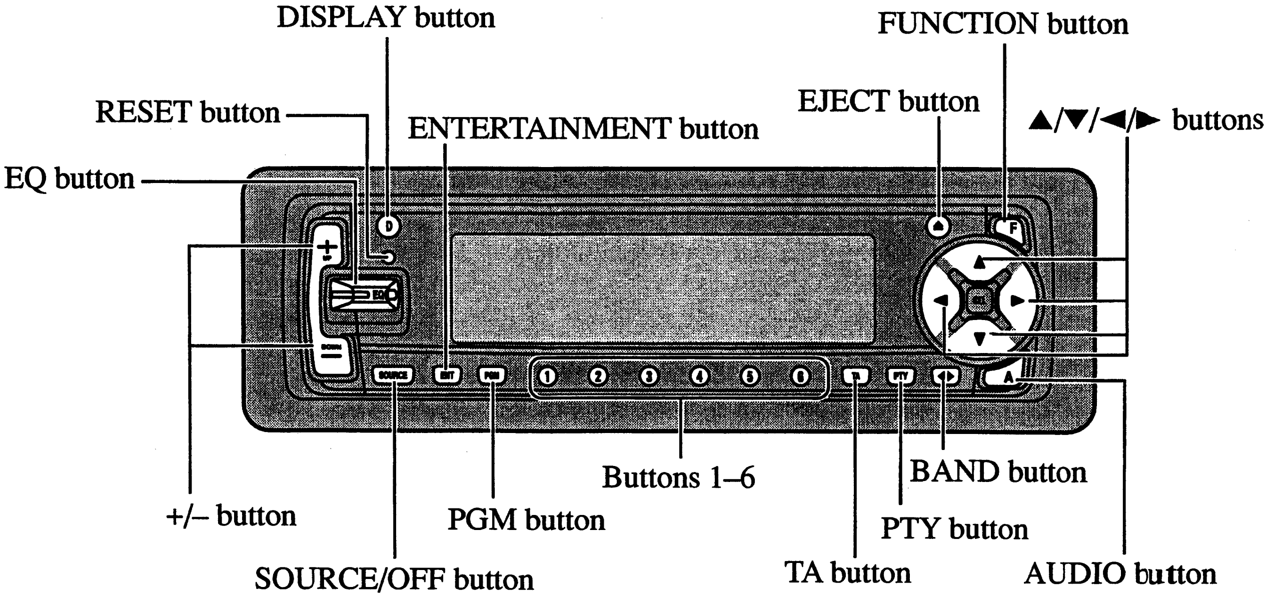
Note:
When a subwoofer is connected to this unit instead of a rear right speaker, do not connect the rear left speaker lead to anything. For details, refer to the Initial Setting Menu in the Operation Manual.

● Connection Diagram (KEH-P8850/ES)

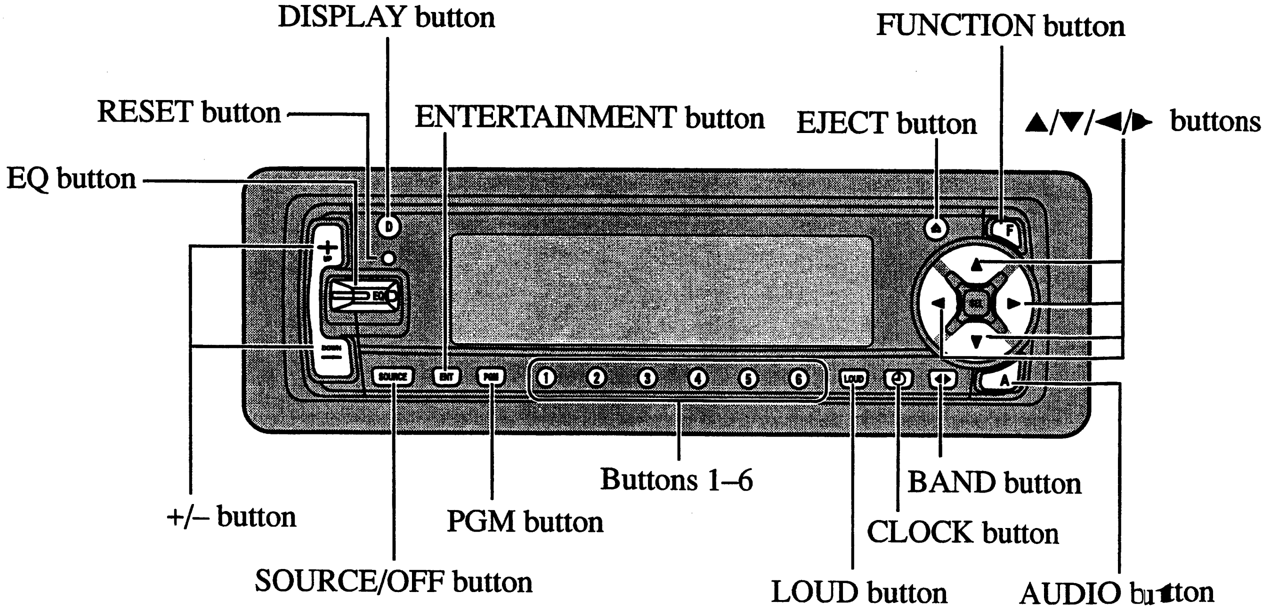

Multi-CD player (sold separately)
Antenna jack
IP-BUS cable
This Product
IP-BUS input (Blue)
Front output
Rear output
Subwoofer output or Non-Fading output
Connecting cords with RCA pin plugs (sold separately)
Power amp (sold separately)
Power amp (sold separately)
Power amp (sold separately)
Blue/white
To system control terminal of the power amp or Auto-antenna relay control terminal. (Max. 300 mA 12 V DC.)
System remote control
Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.
See the section "DFS Alarm Installation".
White/orange
White/red
Brown
White/yellow
Yellow
To terminal always supplied with power regardless of ignition switch position.
Fuse holder
Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Fuse resistor
Orange/White
To lighting switch terminal.
Fuse resistor
Black (ground)
To vehicle (metal) body.
With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.
Perform these connections when using a different amp (sold separately).
Front speaker
Front speaker
Front speaker
Left
Rear speaker
White
White/black
Green
Green/black
Gray
Gray/black
Violet
Violet/black
Front speaker
Right
Rear speaker
Rear speaker
Subwoofer
Rear speaker
Subwoofer
⊕
⊖

8.1 OPERATIONS

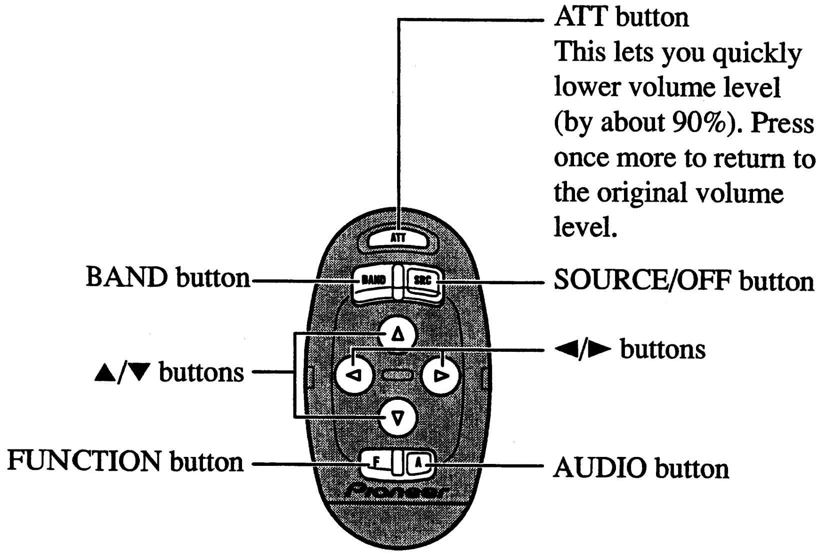
● **KEH-P8800R/EW, KEH-P8800R-W/EW**


DISPLAY button
FUNCTION button
RESET button
ENTERTAINMENT button
EJECT button
▲/▼/◀/▶ buttons
EQ button
+/– button
PGM button
SOURCE/OFF button
Buttons 1–6
BAND button
PTY button
TA button
AUDIO button

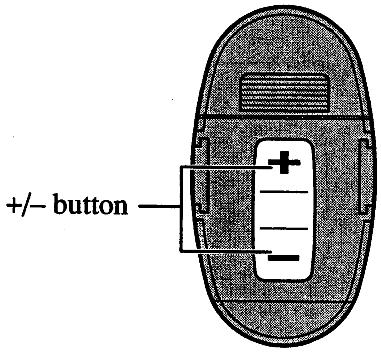
● **KEH-P8850/ES**


DISPLAY button
FUNCTION button
RESET button
ENTERTAINMENT button
EJECT button
▲/▼/◀/▶ buttons
EQ button
+/– button
PGM button
SOURCE/OFF button
Buttons 1–6
BAND button
CLOCK button
LOUD button
AUDIO button

● KEH-P8800R/EW, KEH-P8800R-W/EW

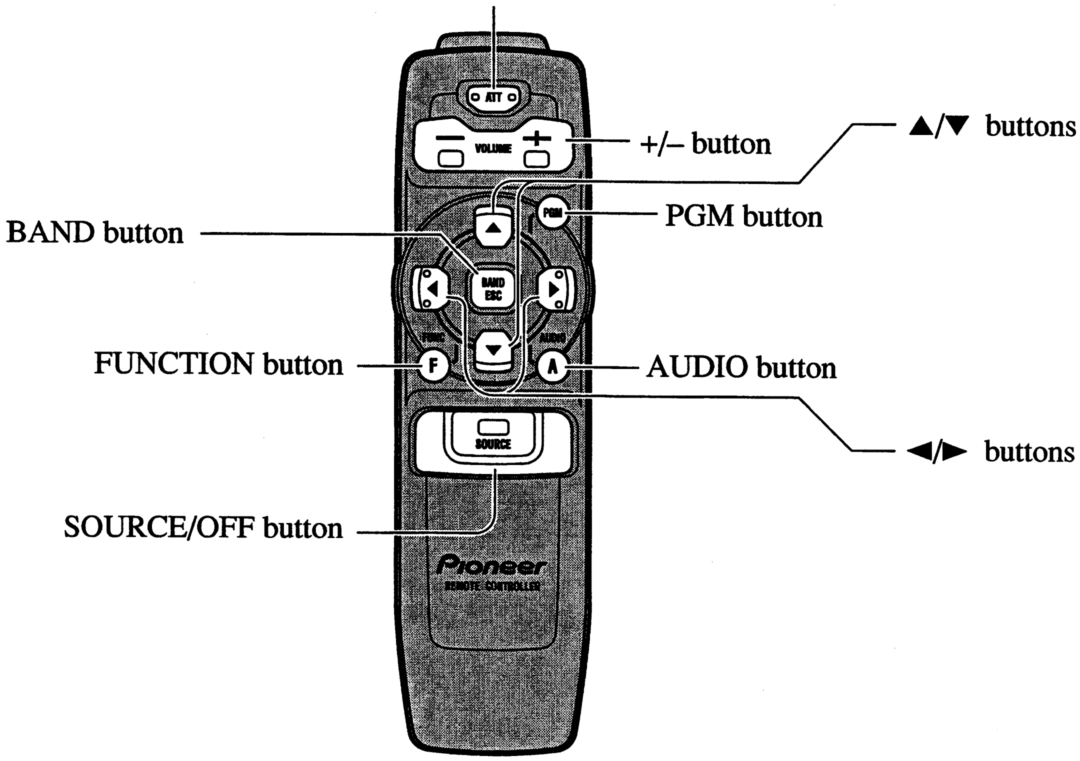

ATT button
BAND button
SOURCE/OFF button
▲/▼ buttons
◀/▶ buttons
FUNCTION button
AUDIO button
ATT
BAND
SRC
F
A
Pioneer

ATT button
This lets you quickly lower volume level (by about 90%). Press once more to return to the original volume level.



● KEH-P8850/ES

ATT button
This lets you quickly lower volume level (by about 90%).
Press once more to return to the original volume level.

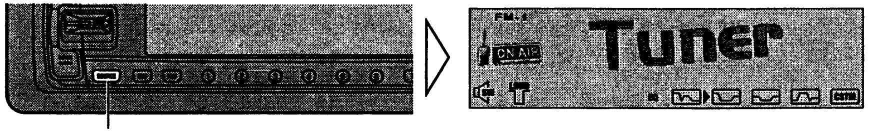

▲/▼ buttons
+/– button
PGM button
BAND button
FUNCTION button
AUDIO button
◀/▶ buttons
SOURCE/OFF button
ATT
VOLUME
PGM
BAND ESC
F
A
SOURCE
Pioneer
REMOTE CONTROLLER

To Listen to Music

The following explains the initial of operations required before you can listen to music.

Note:
- Loading a cassette in this product.

1. Select the desired source (e.g. Tuner).

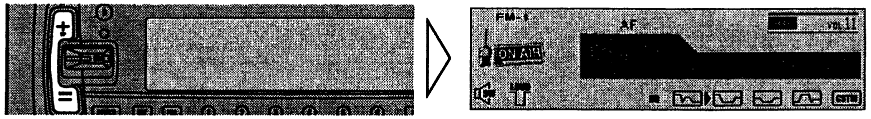


Each press changes the Source ...

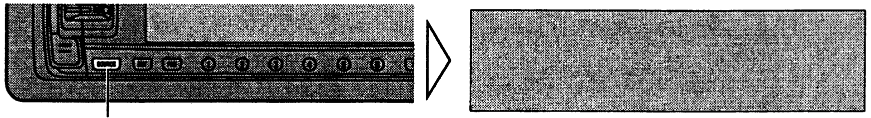
Each press of the SOURCE/OFF button selects the desired source in the following order:
Tuner → DAB (Digital Audio Broadcasting) Tuner → Cassette player
→ Multi-MD player → Multi-CD player → AUX

Note:
- In the following cases, the sound source will not change:
  - * No Multi-CD player is connected to this product.
  - * No Multi-MD player is connected to this product.
  - * No DAB tuner is connected to this product.
  - * No tape is set in this product.
  - * No magazine is set in the Multi-CD player.
  - * AUX (external input) is set to OFF.

2. Raise or lower the volume.



3. Source OFF.



Hold for 1 second or more

Basic Operation of Tuner

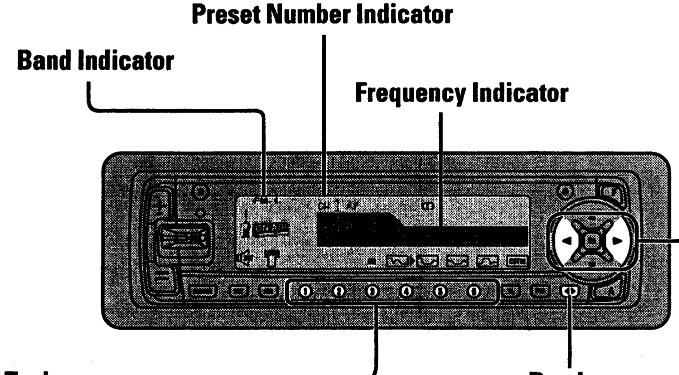
This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations.

Manual and Seek Tuning

- **You can select the tuning method by changing the length of time you press the ◄/► button.**

Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:
- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcast stations. Seek Tuning starts as soon as you stop pressing the button.
- "Ⓒ" stereo indicator lights when a stereo station is selected.



Preset Tuning

Band

FM-1 → FM-2 → FM-3
→ MW/LW

- **You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.**

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:
- Up to 18 FM stations (6 in FM-1, FM-2 and FM-3) and 6 MW/LW stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

Basic Operation of Cassette Player

Note:
- Be sure to close the front panel after loading or ejecting a cassette.

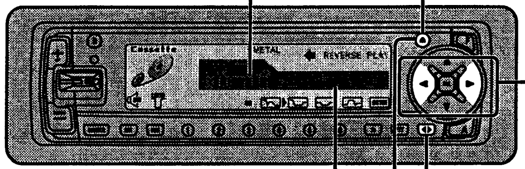
Eject

Press the EJECT button, and you can open the front panel before ejection.

In case of opening the front panel, you can just eject a cassette tape.

Note:
- The Tape function can be turned ON/OFF with the cassette tape remaining in this product.

Direction Indicator



Direction Change

Elapsed Play Time Indicator

Note:
- The continuous playback time count starts at "00m00s" at the following times.
  - * When a tape is inserted.
  - * When the tape direction is changed.
  - * When you rewind the tape side currently playing back to the beginning.
- The continuous playback time count is halted when fast-forwarding/rewinding and while the Music Search function is operating.

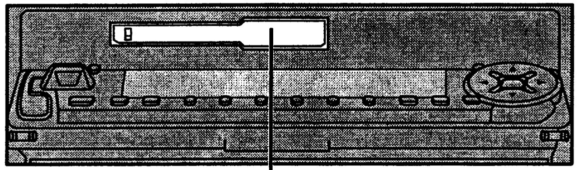
Fast Forward/Rewind and Music Search

- **Each press of the ► button selects Fast forward or Forward-Music Search.**

  Fast Forward → FF M-Search (Forward-Music Search) → Nomal Playback
- **Each press of the ◄ button selects Rewind-Music Search.**

  Rewind → REW M-Search (Rewind-Music Search) → Nomal Playback

Note:
- Fast Forward/Rewind and Music Search can be canceled by pressing the BAND button.



Cassette Loading Slot

If a cassette tape is inserted, the front panel is closed automatically.

Note:
- "METAL" appears on the display when a metal or chrome tape is inserted. Nothing is displayed for a normal tape.

Open

Press the EJECT button for 1 second or more, and you can open the front panel without ejecting a cassette tape.

In case of opening the front panel, you can close it.

Note:
- When opening the front panel, the 1 to 6 buttons are not available.

⚠WARNING:
- Do not use with the front panel left open. If you do leave it open, it may result in injury in the event of an accident.

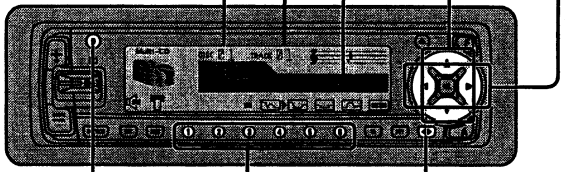
Basic Operation of Multi-CD Player

This product can control a Multi-CD player. (With certain old type Multi-CD players, using a multiple connection adapter lets you connect multiple units which you can control with this product.)

Track Search and Fast Forward/Reverse

- **You can select between Track Search or Fast Forward/Reverse by pressing the ◀/▶ button for a different length of time.**

Track Search	0.5 seconds or less
Fast Forward/Reverse	Continue pressing



Switching the Display

Each press of the DISPLAY button changes the display in the following order:
Play mode (Play Time)
→ Disc Title

Note:
- If you switch displays when disc titles have not been input, "No Title" is displayed.

Switching the Multi-CD Player

When two or more Multi-CD players are connected using a multiple connection adapter, you can select the Multi-CD player by pressing the BAND button.

Magazine 1 → Magazine 2
→ Magazine 3
(Displayed about for 2 seconds.)

Disc Number Search (for 6-Disc, 12-Disc types)

- **You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.**

Note:
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds or longer.

Disc Number Rough Search (for 50-Disc type only)

This handy function lets you select discs loaded in a 50-Disc Multi-CD Player using the 1 to 5 buttons. The 50 discs are divided into five blocks, with each of the 1 to 5 buttons assigned to a block.

- **Select the desired block with the 1 to 5 buttons.**

Note:
- After completing a rough search, use the ▲ and ▼ buttons to select a desired disc.

Note:
- The Multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. "READY" is displayed.
- When a magazine is loaded into a 50-Disc type Multi-CD Player, information on all the discs in the magazine is read.
  If you start playing a disc on a 50-Disc type Multi-CD Player before reading of information on all discs has been completed, reading of information stops part way through. This will prevent you from using the ITS function. (If you try and use this function, "Not Ready" is displayed.)
  If this happens, reading of information begins again when you switch to a component other than the 50-Disc Type Multi-CD Player.
- If the Multi-CD player cannot operate properly, an error message such as "ERROR-14" is displayed. Refer to Multi-CD Player Owner's Manual.
- If there are no discs in the Multi-CD player magazine, "No Disc" is displayed.
- "LOADING" will be displayed in the following cases:
  * If the disc in the extra tray in selected.
  * If the disc in moved from the extra tray to the magazine.
  (Refer to the 50-Disc Type Multi-CD Player Owner's Manual.)
- You cannot use the "Ejecting a Single Disc", "Frequency Play", "Music Group Play" or "ABC Disc Title Search" functions with this product.

When playing a CD TEXT disc on a CD TEXT compatible Multi-CD Player:
- You can use the following two functions. Refer to Multi-CD Player's Owner's Manual for operation details.
  * Title display switching
  * Title scroll
- You cannot switch to the Disc Title Input mode in the Detailed Setting Menu.

Specifications (KEH-P8800R/EW, KEH-P8800R-W/EW)

General

Power source .... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system .... Negative type
Max. current consumption .... 10.0 A
Dimensions
    (mounting size) ...... 178 (W) × 50 (H) × 155 (D) mm
    (front face) .... 188 (W) × 58 (H) × 20 (D) mm
Weight .... 1.6 kg

Audio

Maximum power output .... 45 W × 4
    45 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for Subwoofer)
Continuous power output .... 27 W × 4
    (DIN45324, +B = 14.4 V)
Load impedance
    .... 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout maximum output
    level/output impedance .... 4.0 V/100 Ω
Equalizer (3-Band Parametric Equalizer)
    (Low) .... Frequency: 40/80/100/160 Hz
        Q Factor: 0.35/0.59/0.95/1.15
        (+6 dB when boosted)
        Gain: ±12 dB
    (Mid) .... Frequency: 200/500/1k/2k Hz
        Q Factor: 0.35/0.59/0.95/1.15
        (+6 dB when boosted)
        Gain: ±12 dB
    (High) .... Frequency: 3.15k/8k/10k/12.5k Hz
        Q Factor: 0.35/0.59/0.95/1.15
        (+6 dB when boosted)
        Gain: ±12 dB
Loudness contour
    (Low) .... +3.5 dB (100 Hz), +3 dB (10 kHz)
    (Mid) .... +10 dB (100 Hz), +6.5 dB (10 kHz)
    (High) .... +11 dB (100 Hz), +11 dB (10 kHz)
        (volume: –30 dB)
HPF
    Frequency .... 50/80/125 Hz
    Slope .... –12 dB/oct.
Subwoofer
    Frequency .... 50/80/125 Hz
    Slope .... –18 dB/oct.
    Gain .... ±12 dB
    Phase .... Normal/Reverse

Cassette player

Tape .... Compact cassette tape (C-30 – C-90)
Tape speed ...... 4.76 cm/sec.(+0.14 cm/sec.,-0.05 cm/sec.)
Fast forward/rewinding time .... Approx. 100 sec. for C-60
Wow & flutter .... 0.09% (WRMS)
Frequency response .... Metal: 30 – 19,000 Hz (±3 dB)
Stereo separation .... 45 dB
Signal-to-noise ratio
    ...... Metal: Dolby B NR IN: 67 dB (IEC-A network)
    Dolby NR OUT: 61 dB (IEC-A network)

FM tuner

Frequency range .... 87.5 – 108 MHz
Usable sensitivity
    .... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio .... 70 dB (IEC-A network)
Distortion .... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response .... 30 – 15,000 Hz (±3 dB)
Stereo separation .... 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range .... 531 – 1,602 kHz
Usable sensitivity .... 18 µV (S/N: 20 dB)
Selectivity .... 50 dB (±9 kHz)

LW tuner

Frequency range .... 153 – 281 kHz
Usable sensitivity .... 30 µV (S/N: 20 dB)
Selectivity .... 50 dB (±9 kHz)

Specifications (KEH-P8850/ES)

General

Power source .... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system .... Negative type
Max. current consumption .... 10.0 A
Dimensions
    (DIN) (chassis) ...... 178 (W) × 50 (H) × 155 (D) mm
        (nose) .... 188 (W) × 58 (H) × 20 (D) mm
    (D) (chassis) ...... 178 (W) × 50 (H) × 160 (D) mm
        (nose) .... 170 (W) × 46 (H) × 15 (D) mm
Weight .... 1.6 kg

Audio

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output .... 45 W × 4
    45 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for Subwoofer)
Load impedance
    .... 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout maximum output level/
    output impedance .... 4.0 V/100 Ω
Equalizer (3-Band Parametric Equalizer)
    (Low) .... Frequency: 40/80/100/160 Hz
        Q Factor: 0.35/0.59/0.95/1.15
        (+6 dB when boosted)
        Gain: ±12 dB
    (Mid) .... Frequency: 200/500/1k/2k Hz
        Q Factor: 0.35/0.59/0.95/1.15
        (+6 dB when boosted)
        Gain: ±12 dB
    (High) .... Frequency: 3.15k/8k/10k/12.5k Hz
        Q Factor: 0.35/0.59/0.95/1.15
        (+6 dB when boosted)
        Gain: ±12 dB
Loudness contour
    (Low) .... +3.5 dB (100 Hz), +3 dB (10 kHz)
    (Mid) .... +10 dB (100 Hz), +6.5 dB (10 kHz)
    (High) .... +11 dB (100 Hz), +11 dB (10 kHz)
        (volume: –30 dB)
HPF
    Frequency .... 50/80/125 Hz
    Slope .... –12 dB/oct.
Subwoofer output
    Frequency .... 50/80/125 Hz
    Slope .... –18 dB/oct.
    Gain .... ±12 dB
    Phase .... Normal/Reverse

Cassette player

Tape .... Compact cassette tape (C-30 – C-90)
Tape speed ...... 4.76 cm/sec.(+0.14 cm/sec.,-0.05 cm/sec.)
Fast forward/rewinding time .... Approx. 100 sec. for C-60
Wow & flutter .... 0.09% (WRMS)
Frequency response .... Metal: 30 – 19,000 Hz (±3 dB)
Stereo separation .... 45 dB
Signal-to-noise ratio
    ...... Metal: Dolby B NR IN: 67 dB (IEC-A network)
    Dolby NR OUT: 61 dB (IEC-A network)

FM tuner

Frequency range .... 87.5 – 108 MHz
Usable sensitivity
    .... 10 dBf (0.9 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 15 dBf (1.5 µV/75 Ω, mono)
Signal-to-noise ratio .... 70 dB (IEC-A network)
Distortion .... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response .... 30 – 15,000 Hz (±3 dB)
Stereo separation .... 40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range .... 531 – 1,602 kHz (9 kHz)
    530 – 1,710 kHz (10 kHz)
Usable sensitivity .... 18 µV (S/N: 20 dB)
Selectivity .... 50 dB (±9 kHz)
    50 dB (±10 kHz)

Printed by: Schaltungsdienst Lange Berlin (Germany)

Pioneer

PION-05780

Service Manual

ORDER NO.
CRT2469

MULTI-CD/MD/DAB CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P8900R EW

KEH-P8900R-W EW

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH FM/AM TUNER

KEH-P8950 ES

- This service manual should be used together with the following manual(s):

Model	Order No.	Mech. Module	Remarks
KEH-P8800R/EW	CRT2341		
CX-631	CRT1640	2L	Mech. Module:Circuit Description, Mech.Description, Disassembly

EXPLODED VIEWS AND PARTS LIST

PACKING(Page 2)

- Parts marked by "*" and ⊗ can not be supplied.
- PACKING SECTION PARTS LIST

			Part No.	
Mark	No.	Description	KEH-P8800R/EW	KEH-P8900R/EW
	1	Cord Assy	CDE6007	CDE6339
	9-2	Owner's Manual	CRD2956	CRD3225
	9-3	Owner's Manual	CRD2957	CRD3226
	9-4	Owner's Manual	CRD2958	CRD3227
	9-5	Installation Manual	CRD2959	CRD3228
*	9-8	Warranty Card	CRY1087	CRY1157
	9-9	Caution Card	CRP1208	Not used
	12	Carton	CHG3778	CHG4034
	13	Contain Box	CHL3778	CHL4034

PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER EUROPE N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

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K-ZZU. FEB. 2000 Printed in Japan

PACKING(Page 2)

● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.	
			KEH-P8800R-W/EW	KEH-P8900R-W/EW
	1	Cord Assy	CDE6007	CDE6339
	9-2	Owner's Manual	CRD2956	CRD3225
	9-3	Owner's Manual	CRD2957	CRD3226
	9-4	Owner's Manual	CRD2958	CRD3227
	9-5	Installation Manual	CRD2959	CRD3228
*	9-8	Warranty Card	CRY1087	CRY1157
	9-9	Caution Card	CRP1208	Not used
	12	Carton	CHG3779	CHG4036
	13	Contain Box	CHL3779	CHL4036

PACKING(Page 4)

● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.	
			KEH-P8850/ES	KEH-P8950/ES
	1	Cord Assy	CDE5867	CDE6338
	18-2	Owner's Manual	CRD2962	CRD3229
	18-3	Owner's Manual	CRD2963	CRD3230
	18-5	Installation Manual	CRD2964	CRD3231
	20	Carton	CHG3777	CHG4035
	21	Contain Box	CHL3777	CHL4035

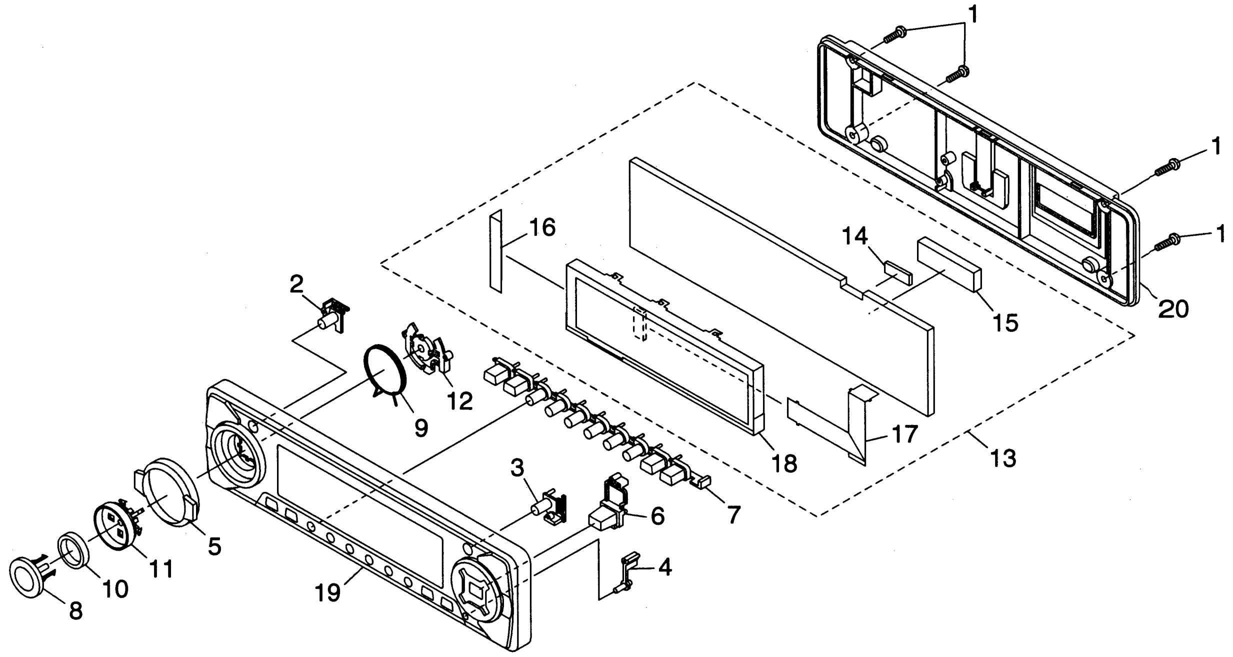
EXTERIOR(Page 6)

● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.			
			KEH-P8800R/EW	KEH-P8900R/EW	KEH-P8900R-W/EW	KEH-P8950/ES
	5	Cord Assy	CDE6007	CDE6339	CDE6339	CDE6338
	42	Panel Assy	CXB3581	CXB5805	CXB5805	CXB5805
	63	PCB	CNP5321	CNP5941	CNP5941	CNP5941
	83	Chassis Unit	CXB3563	CXB5730	CXB5731	CXB3586
	85	Detach Grille Assy	CXB3291	CXB5462	CXB5464	CXB5463

EXPLODED VIEWS AND PARTS LIST

● DETACH GRILLE ASSY



NOTE:

- ● Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- ● Screws adjacent to ∇ mark on the product are used for disassembly.

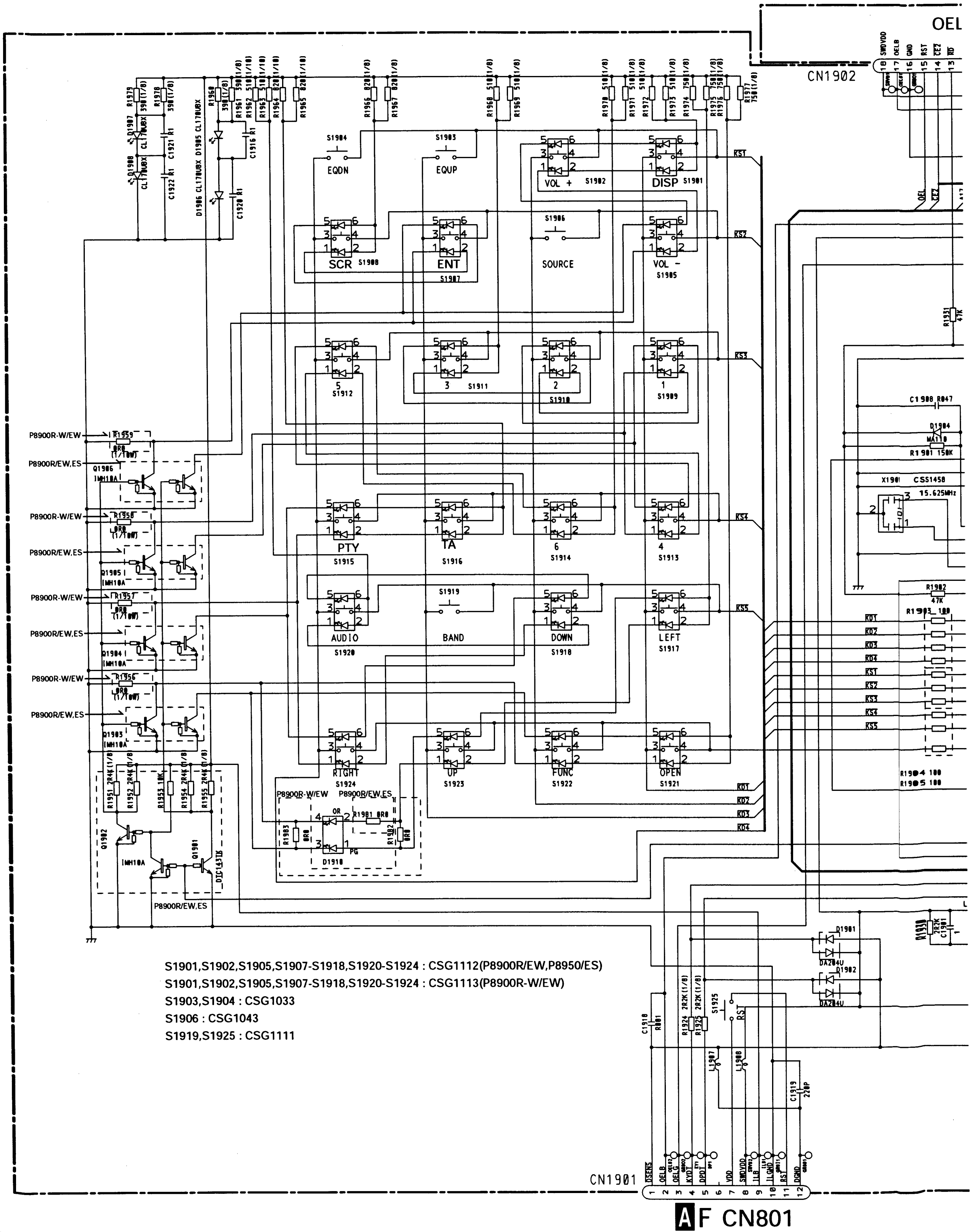
● DETACH GRILLE ASSY SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BPZ20P080FZK
	2	Button(DISP)	CAC6511
	3	Button(OPEN)	CAC6512
	4	Button(RESET)	CAC6513
	5	Knob	CAC6732
	6	Button(BAND)	CAC6524
	7	Button(1-6,etc.) (P8900R/EW,P8950/ES)	CAC6721
		Button(1-6,etc.) (P8900R-W/EW)	CAC6723
	8	Button(P8900R/EW,P8950/ES)	CAC6719
		Button(P8900R-W/EW)	CAC6718
	9	Spring	CBH2415
	10	Cushion	CNM6767
	11	Lighting Conductor	CNV6214
	12	Lighting Conductor	CNV6215
	13	Keyboard Unit (P8900R/EW,P8950/ES)	CWM7063
		Keyboard Unit (P8900R-W/EW)	CWM7064
	14	Connector(CN1902)	CKS3995
	15	Connector(CN1901)	CKS3996
	16	Insulator	CNM6775
*	17	PCB	CNP5508
	18	OEL Unit	MXK8002
	19	Grille Unit(P8900R/EW)	CXB5336
		Grille Unit(P8900R-W/EW)	CXB5337
		Grille Unit(P8950/ES)	CXB5338
	20	Cover Unit(P8900R/EW)	CXB5339
		Cover Unit(P8900R-W/EW)	CXB5340
		Cover Unit(P8950/ES)	CXB5341

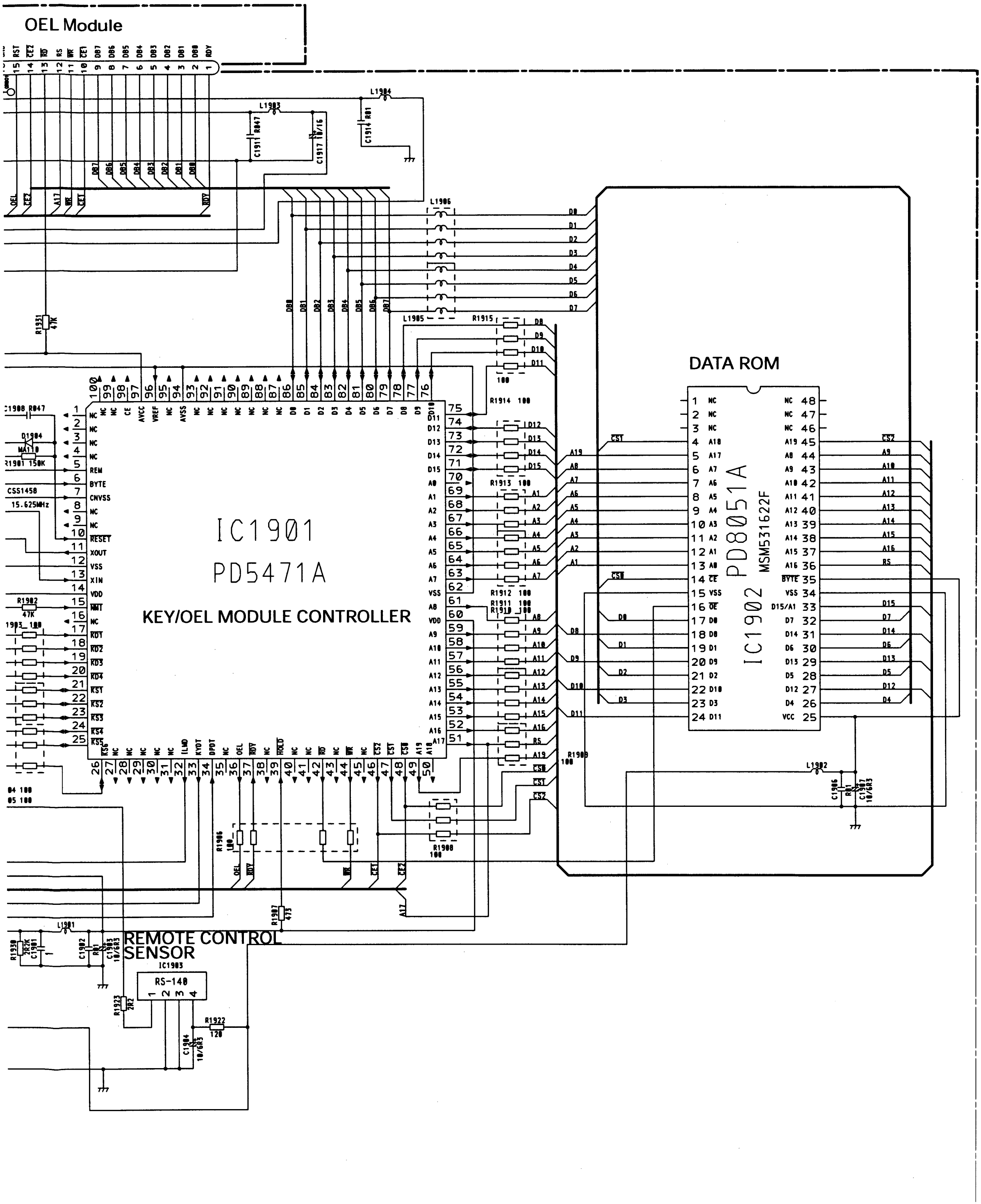
SCHEMATIC DIAGRAM

KEYBOARD UNIT

C F KEYBOARD UNIT


OEL
CN1902
CN1901
A F CN801
EQDN
EQUP
VOL +
DISP
SCR
ENT
SOURCE
VOL -
5
3
2
1
PTY
TA
6
4
AUDIO
BAND
DOWN
LEFT
RIGHT
UP
FUNC
OPEN
S1901
S1902
S1903
S1904
S1905
S1906
S1907
S1908
S1909
S1910
S1911
S1912
S1913
S1914
S1915
S1916
S1917
S1918
S1919
S1920
S1921
S1922
S1923
S1924
S1925
KS1
KS2
KS3
KS4
KS5
KD1
KD2
KD3
KD4
RST
P8900R-W/EW
P8900R/EW,ES
Q1901
Q1902
Q1903
Q1904
Q1905
Q1906
IMH10A
DTC143TK
D1910
PG
X1901
CSS1458
15.625MHz
D1904
MA110
R1901 150K
R1902 47K
R1931 47K
C1908 R047
D1901
D1902
DA204U
DSENS
OELB
OELG
KYDT
DPDT
VDD
SWDVDD
ILB
ILGND
RS
DGND
SWDVDD
OELB
GND
RST
CE2
RD

S1901,S1902,S1905,S1907-S1918,S1920-S1924 : CSG1112(P8900R/EW,P8950/ES)
S1901,S1902,S1905,S1907-S1918,S1920-S1924 : CSG1113(P8900R-W/EW)
S1903,S1904 : CSG1033
S1906 : CSG1043
S1919,S1925 : CSG1111

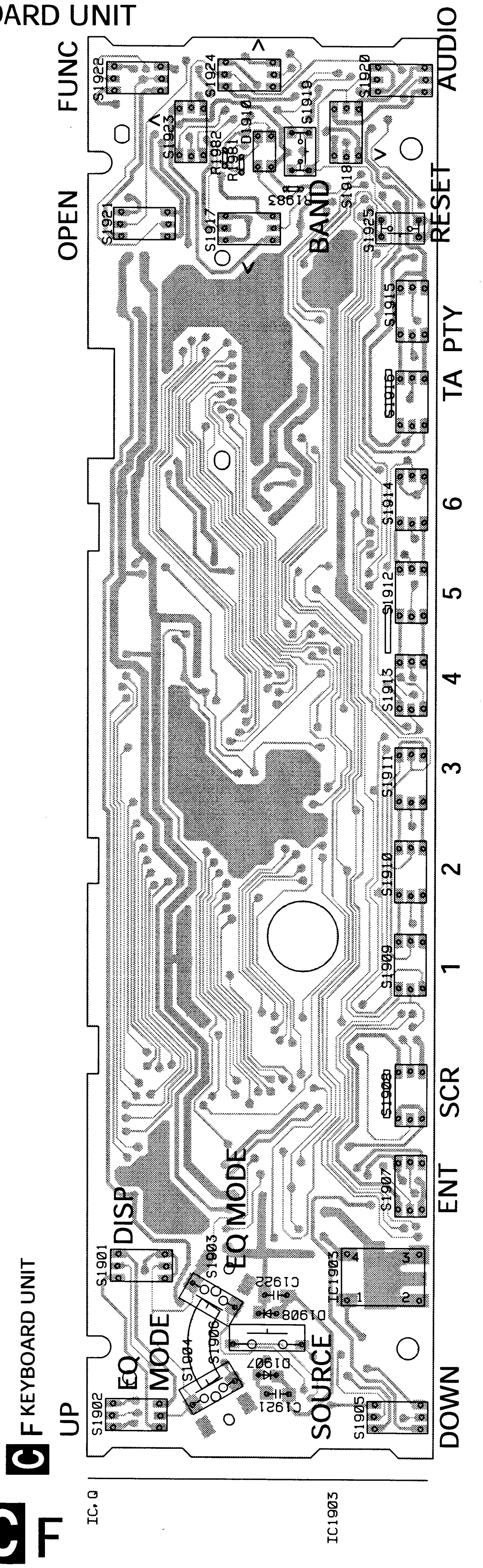

OEL Module
RST
CE2
RD
RS
WR
CE1
DB7
DB6
DB5
DB4
DB3
DB2
DB1
DB0
RDY
L1903
L1904
C1911 R047
C1917 10/16
C1914 R01
L1906
L1905
R1915
R1931 47K
R1914 100
R1913 100
R1912 100
R1911 100
R1910 100
R1909 100
R1908 100
R1906 100
R1907 473
DATA ROM
IC1901
PD5471A
KEY/OEL MODULE CONTROLLER
IC1902
PD8051A
MSM531622F
C1908 R047
D1904 MA110
R1901 150K
CSS1450 15.625MHz
R1902 47K
REMOTE CONTROL SENSOR
IC1903
RS-140
L1901
C1901
R1930
C1902
C1903 10/6R3
R1923 2R2
R1922 120
C1904 10/6R3
L1902
C1906
C1907 10/6R3
REM
BYTE
CNVSS
RESET
XOUT
VSS
XIN
VDD
NMI
KD1
KD2
KD3
KD4
KS1
KS2
KS3
KS4
KS5
KS6
AVCC
VREF
AVSS
ILMD
KYOT
DPDT
OEL
RDY
HOLD
CS0
CS1
CS2
A19
A18
A17
A16
A15
A14
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D15/A1
VCC
CE
OE
NC

KEH-P8900R,P8900R-W,P8950

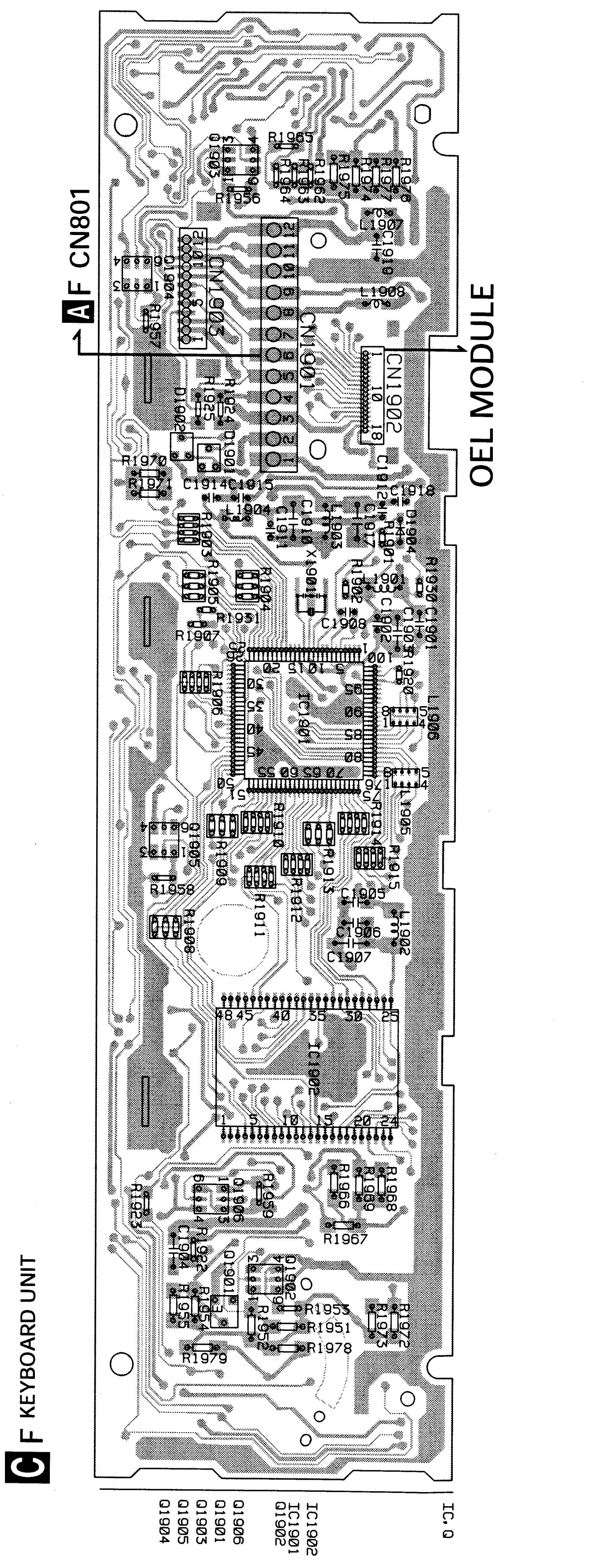
PCB CONNECTION DIAGRAM

KEYBOARD UNIT

SIDE A


FUNC
OPEN
AUDIO
RESET
BAND
PTY
TA
6
5
4
3
2
1
SCR
ENT
DISP
EQ MODE
EQ
MODE
UP
SOURCE
DOWN
S1922
S1923
S1924
S1920
S1919
S1918
S1921
S1917
S1925
D1910
R1982
R1981
R1983
S1915
S1916
S1914
S1912
S1913
S1911
S1910
S1909
S1908
S1907
S1901
S1903
S1906
S1904
S1902
S1905
IC1903
C1922
D1908
D1907
C1921
C F KEYBOARD UNIT
IC,Q
IC1903

SIDE B


A F CN801
OEL MODULE
CN1901
CN1902
CN1903
IC1901
IC1902
Q1903
Q1904
Q1905
Q1906
Q1901
D1902
D1901
X1901
L1902
L1903
L1904
L1905
L1906
L1907
L1908
R1965
R1956
R1957
R1970
R1971
R1951
R1953
R1978
R1979
R1966
R1967
R1968
R1969
R1972
R1973
C1905
C1906
C1907
C1908
C1914
C1915
C1918
C1919
R1903
R1904
R1905
R1906
R1907
R1908
R1909
R1910
R1911
R1912
R1913
R1914
R1915
R1958
C F KEYBOARD UNIT
IC,Q
IC1902
IC1901
Q1902
Q1906
Q1901
Q1903
Q1905
Q1904

C F

5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

  Chip Resistor

  RS1/○S○○○J,RS1/○○S○○○J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....

CF

Unit Number : CWM7063
(P8900R/EW,P8950/ES)
Unit Name : Keyboard Unit

MISCELLANEOUS

Circuit Symbol and No.		Part Name	Part No.
IC	1901	IC	PD5471A
IC	1902	IC	PD8051A
IC	1903	HIC Module	RS-140
Q	1901	Transistor	DTC143TK
Q	1902	Transistor	IMH10A
Q	1903	Transistor	IMH10A
Q	1904	Transistor	IMH10A
Q	1905	Transistor	IMH10A
Q	1906	Transistor	IMH10A
D	1901	Diode Network	DA204U
D	1902	Diode Network	DA204U
D	1904	Diode	MA110
D	1907	LED	CL170UBX
D	1908	LED	CL170UBX
D	1910	LED	CL155DPGD
L	1901	Chip Inductor	LCTA2R2J3225
L	1902	Chip Inductor	LCTA2R2J3225
L	1903	Inductor	CTF1484
L	1904	Inductor	LCTA220J2520
L	1905	Inductor Ary	CTF1421
L	1906	Inductor Ary	CTF1421
L	1907	Inductor	CTF1295
L	1908	Inductor	CTF1295
X	1901	Ceramic Resonator 15.62MHz	CSS1458
S	1901	Push Switch	CSG1113
S	1902	Push Switch	CSG1113
S	1903	Spring Switch	CSN1033
S	1904	Spring Switch	CSN1033
S	1905	Push Switch	CSG1113
S	1906	Switch	CSG1043
S	1907	Push Switch	CSG1113
S	1908	Push Switch	CSG1113
S	1909	Push Switch	CSG1113
S	1910	Push Switch	CSG1113
S	1911	Push Switch	CSG1113
S	1912	Push Switch	CSG1113
S	1913	Push Switch	CSG1113
S	1914	Push Switch	CSG1113
S	1915	Push Switch	CSG1113
S	1916	Push Switch	CSG1113
S	1917	Push Switch	CSG1113
S	1918	Push Switch	CSG1113
S	1919	Push Switch	CSG1111
S	1920	Push Switch	CSG1113
S	1921	Push Switch	CSG1113
S	1922	Push Switch	CSG1113
S	1923	Push Switch	CSG1113
S	1924	Push Switch	CSG1113
S	1925	Push Switch	CSG1111

RESISTORS

Circuit Symbol and No.		Part Name	Part No.
R	1901		RS1/16S154J
R	1902		RS1/16S473J
R	1903		RA4C101J
R	1904		RA3C101J
R	1905		RA3C101J
R	1906		RA4C101J
R	1907		RS1/16S473J
R	1908		RA3C101J
R	1909		RA3C101J
R	1910		RA4C101J
R	1911		RA4C101J
R	1912		RA4C101J
R	1913		RA3C101J
R	1914		RA4C101J
R	1915		RA4C101J
R	1922		RS1/10S121J
R	1923		RS1/10S2R2J
R	1924		RS1/8S222J
R	1925		RS1/8S222J
R	1930		RS1/16S222J
R	1931		RS1/16S473J
R	1951		RS1/8S242J
R	1952		RS1/8S242J
R	1953		RS1/10S103J
R	1954		RS1/8S242J
R	1955		RS1/8S242J
R	1962		RS1/10S511J
R	1963		RS1/10S511J
R	1964		RS1/10S821J
R	1965		RS1/10S821J
R	1966		RS1/8S821J
R	1967		RS1/8S821J
R	1968		RS1/8S511J
R	1969		RS1/8S511J
R	1970		RS1/8S511J
R	1971		RS1/8S511J
R	1972		RS1/8S511J
R	1973		RS1/8S511J
R	1974		RS1/8S511J
R	1975		RS1/8S511J
R	1976		RS1/8S751J
R	1977		RS1/8S751J
R	1978		RS1/8S391J
R	1979		RS1/8S391J
R	1981		RS1/16S0R0J

CAPACITORS

Circuit Symbol and No.		Part Name	Part No.
C	1901		CKSQYB105K10
C	1902		CKSRYB103K25
C	1903		CSZS100M6R3
C	1904		CSZS100M6R3
C	1906		CKSQYB103K25

=====Circuit Symbol and No.		===Part Name	Part No.
C	1907		CSZS100M6R3
C	1908		CKSRYB473K16
C	1911		CKSRYB473K16
C	1914		CKSRYB103K25
C	1917		CSZSR100M16
C	1918		CKSRYB102K50
C	1919		CCSQCH221J50
C	1921		CKSQYB104K25
C	1922		CKSQYB104K25

CF

Unit Number : CWM7064
(P8900R-W/EW)
Unit Name : Keyboard Unit

MISCELLANEOUS

Circuit Symbol	No.	Part Name	Part No.
IC	1901	IC	PD5471A
IC	1902	IC	PD8051A
IC	1903	HIC Module	RS-140
D	1901	Diode Network	DA204U
D	1902	Diode Network	DA204U
D	1904	Diode	MA110
D	1907	LED	CL170UBX
D	1908	LED	CL170UBX
D	1910	LED	CL155DPGD
L	1901	Chip Inductor	LCTA2R2J3225
L	1902	Chip Inductor	LCTA2R2J3225
L	1903	Inductor	CTF1484
L	1904	Inductor	LCTA220J2520
L	1905	Inductor Ary	CTF1421
L	1906	Inductor Ary	CTF1421
L	1907	Inductor	CTF1295
L	1908	Inductor	CTF1295
X	1901	Ceramic Resonator 15.62MHz	CSS1458
S	1901	Push Switch	CSG1112
S	1902	Push Switch	CSG1112
S	1903	Spring Switch	CSN1033
S	1904	Spring Switch	CSN1033
S	1905	Push Switch	CSG1112
S	1906	Switch	CSG1043
S	1907	Push Switch	CSG1112
S	1908	Push Switch	CSG1112
S	1909	Push Switch	CSG1112
S	1910	Push Switch	CSG1112
S	1911	Push Switch	CSG1112
S	1912	Push Switch	CSG1112
S	1913	Push Switch	CSG1112
S	1914	Push Switch	CSG1112
S	1915	Push Switch	CSG1112
S	1916	Push Switch	CSG1112
S	1917	Push Switch	CSG1112
S	1918	Push Switch	CSG1112
S	1919	Push Switch	CSG1111
S	1920	Push Switch	CSG1112
S	1921	Push Switch	CSG1112
S	1922	Push Switch	CSG1112
S	1923	Push Switch	CSG1112
S	1924	Push Switch	CSG1112
S	1925	Push Switch	CSG1111

RESISTORS

Circuit Symbol	No.	Part Name	Part No.
R	1901		RS1/16S154J
R	1902		RS1/16S473J
R	1903		RA4C101J
R	1904		RA3C101J
R	1905		RA3C101J
R	1906		RA4C101J
R	1907		RS1/16S473J
R	1908		RA3C101J
R	1909		RA3C101J
R	1910		RA4C101J
R	1911		RA4C101J
R	1912		RA4C101J
R	1913		RA3C101J
R	1914		RA4C101J
R	1915		RA4C101J
R	1922		RS1/10S121J
R	1923		RS1/10S2R2J
R	1924		RS1/8S222J
R	1925		RS1/8S222J
R	1930		RS1/16S222J
R	1931		RS1/16S473J
R	1956		RS1/10S0R0J
R	1957		RS1/10S0R0J
R	1958		RS1/10S0R0J
R	1959		RS1/10S0R0J
R	1962		RS1/10S511J
R	1963		RS1/10S511J
R	1964		RS1/10S821J
R	1965		RS1/10S821J
R	1966		RS1/8S821J
R	1967		RS1/8S821J
R	1968		RS1/8S511J
R	1969		RS1/8S511J
R	1970		RS1/8S511J
R	1971		RS1/8S511J
R	1972		RS1/8S511J
R	1973		RS1/8S511J
R	1974		RS1/8S511J
R	1975		RS1/8S511J
R	1976		RS1/8S751J
R	1977		RS1/8S751J
R	1978		RS1/8S391J
R	1979		RS1/8S391J
R	1982		RS1/16S0R0J
R	1983		RS1/16S0R0J

CAPACITORS

Circuit Symbol	No.	Part Name	Part No.
C	1901		CKSQYB105K10
C	1902		CKSRYB103K25
C	1903		CSZS100M6R3
C	1904		CSZS100M6R3
C	1906		CKSQYB103K25
C	1907		CSZS100M6R3
C	1908		CKSRYB473K16
C	1911		CKSRYB473K16
C	1914		CKSRYB103K25
C	1917		CSZSR100M16
C	1918		CKSRYB102K50
C	1919		CCSQCH221J50
C	1921		CKSQYB104K25
C	1922		CKSQYB104K25

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